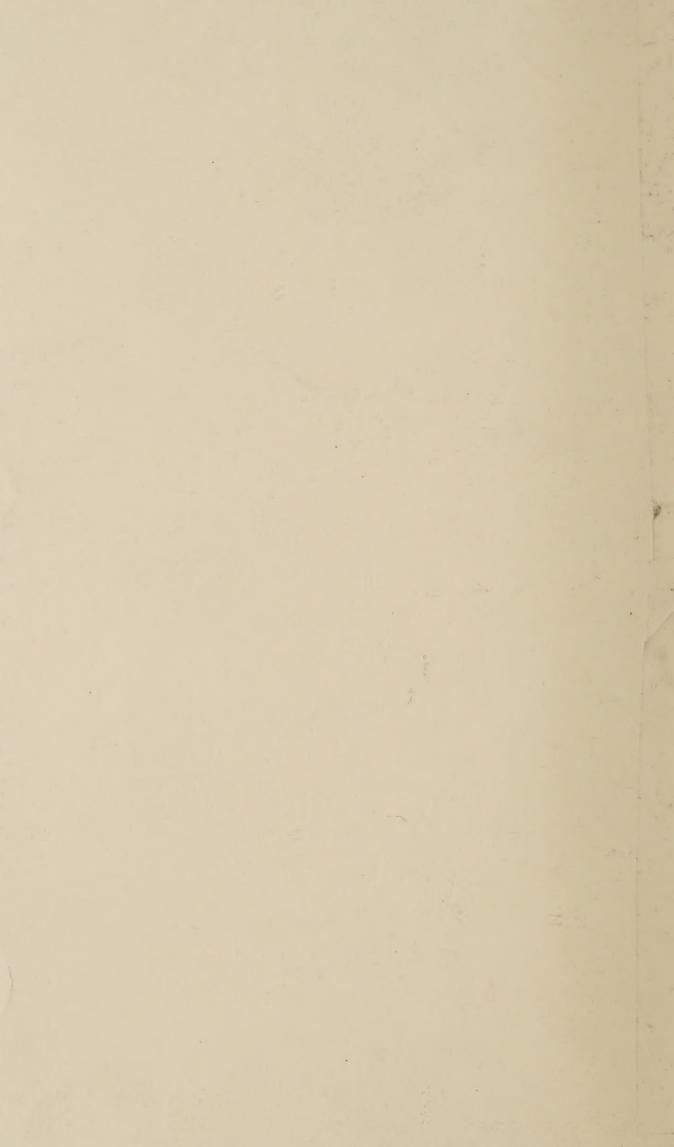
## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.



This circular will be sent regularly to all who apply for it.

No. 404.

## United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., January 31, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[January 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Annual Reports of the Department of Agriculture for the Fiscal Year Ended June 30, 1900. Pp. lxxviii, 1–297, cloth.

Congressional publication; and contains the report of the Secretary of Agriculture to the President, November 24, 1900, and reports of the various Bureaus, Divisions, and Offices for the fiscal year ended June 30, 1900.

Studies on American Grasses.—I. Some Recent Collections of Mexican Grasses. By F. Lamson-Scribner and Elmer D. Merrill. Notes on Panicum nitidum Lam., Panicum scoparium Lam., By F. Lamson-Scribner and and Panicum pubescens Lam. Elmer D. Merrill. III. Miscellaneous Notes and Descriptions of New Species. By F. Lamson-Scribner and Carleton R. Ball. Pp. 55, figs. 23. (Bulletin No. 24, Division of Agrostology.) Price 5 cents.

Information Concerning the Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 94, frontispiece, pls. 17, fig. 1. (Bulletin No. 27, Bureau of Animal Industry.) Price 15 cents.

Experiments on the Effect of Muscular Work Upon the Digestibility of Food and the Metabolism of Nitrogen, Conducted at the University of Tennessee, 1897 to 1899. By Chas. E. Wait, Ph. D., F. C. S., Professor of Chemistry at the University of Tennessee. Pp. 77. (Bulletin No. 89, Office of Experiment Stations.) Price 5 cents.

Experiment Station Record, Vol. XI, No. 12. Pp. 1101-1208, xvi.

Price 10 cents.

Experiment Station Record, Vol. XII, No. 5. Pp. vi, 401-500. Price 10 cents.

The record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per vol-

ume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

Trade of Denmark. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 88. (Bulletin No. 9, Section of Foreign Markets.) Price 5 cents.

Collection and Distribution of Grass Seed: Field Work. Shear, In Charge of Seed and Field Work, Division of Agrostol-

ogy. Pp. 11. (Circular No. 9, Office of the Secretary.)

Grasses and Fodder Plants on the Potomac Flats. By C. R. Ball, Assistant in Charge of Grass Gardens and Experiments within the District of Columbia. Pp. 18. (Circular No. 28, Division of Agrostology.)

Proposed Reforms in Fertilizer Inspection Laws. By H. W. Wiley, Chemist. Pp. 4. (Circular No. 3, Division of Chemistry.) Revised edition.

Fifth Report of Committee on Methods of Teaching Agriculture. Pp. 8. (Circular No. 45, Office of Experiment Stations.)

Monthly List of Publications, December, 1900. Pp. 4. (No. 401,

Division of Publications.)

The Cultivation of Znaim Cucumbers. By David G. Fairchild, Agricultural Explorer. Pp. 4. (Circular No. 2, Section of Seed and Plant Introduction.)

## REPRINTS.

Methods and Results of Investigations on the Chemistry and Economy of Food. By W. O. Atwater, Ph. D. Pp. 222, figs. 15, charts 3. (Bulletin No. 21, Office of Experiment Stations.) Price 15 cents.

A Digest of Metabolism Experiments in Which the Balance of Income and Outgo was Determined. By W. O. Atwater, Ph. D., and C. F. Langworthy, Ph. D. Prepared under supervision of A. C. True, Ph. D., Director, Office of Experiment Stations. Pp. 434. (Bulletin No. 45, Office of Experiment Stations.) Revised. Price 25 cents.

Irrigation in New Jersey. By Edward B. Voorhees, M. A. Pp. 46,

figs. 5. (Bulletin No. 87, O. E. S.) Price 5 cents.

The Use of Water in Irrigation. Discussion of Investigations. By Elwood Mead, Expert in Charge of Irrigation Investigations. Computation of Discharge Records and Preparation of Diagrams. By C. T. Johnson, Assistant in Irrigation Investigations. Pp. iv, 15–82, pls. 26, figs. 13. (Reprint from O. E. S. Bulletin 86.)

Use of Water for Irrigation in Texas. Use of Water in Irrigation in the Pecos Valley. By W. M. Reed, Chief Engineer of the Pecos Irrigation and Improvement Company. Use of Water in Irrigation in Arizona. By W. H. Code, Chief Engineer of the Consolidated Canal Company. Duty of Water Under Gage Canal, Riverside, Cal. By W. Irving, Chief Engineer, Gage Canal. Pp. iv, 83–148, pls. 19. (Reprint, Office of Experiment Stations Bulletin 86.)

Duty of Water in Nebraska. By Special Agent O. V. P. Stout, Professor of Civil Engineering, University of Nebraska. Duty of Water Under the Amity Canal. By Special Agent Thomas Berry, Chief Engineer of the Great Plains Water Company. Duty of Water in Wyoming. By C. T. Johnson, Assistant in Irrigation Investigations. Duty of Water in the Gallatin Valley. By Samuel Fortier, Professor of Irrigation Engineering, Montana College of Agriculture and Mechanic Arts. Duty of Water on Big Cottonwood Creek, Utah. By Special Agent R. C. Gemmell, State Engineer of Utah. Duty of Water Under the Logan and Richmond Canal. By Special Agent George L. Swendsen, Professor of Civil Engineering, Agricultural College of Utah. Duty of Water as Related to the Irrigation Problems of the Boise Valley, Idaho. By Special Agent D. W. Ross, State Engineer of Idaho. Pp. iv, 149–248, pls. 28, figs. 5. (Reprint, Office of Experiment Stations Bulletin No. 86.)

## FARMERS' BULLETINS.

Red Clover Seed: Information for Purchasers. By A. J. Pieters, Assistant Botantist, Division of Botany, In Charge of Pure Seeds Investigations. Pp. 11, figs. 2. (Farmers' Bulletin No. 123.)

#### REPRINTS.

Sweet Potatoes: Culture and Uses. By J. F. Duggar, M. S. Pp. 32, figs. 4. (Farm. Bul. No. 26.) Revised.

Alfalfa or Lucern. By Jared G. Smith. Pp. 24, figs. 3.

Bul. No. 31.)

Silos and Silage. Charles S. Plumb, B. S. Pp. 32, figs. 10. (Farm. Bul. No. 32.)

Kafir Corn: Characteristics, Culture, and Uses. By C. C. George-

Pp. 12, fig. 1. (Farm. Bul. No. 37.)

Spraying for Fruit Diseases. By B. T. Galloway. Pp. 12, figs. 6. (Farm. Bul. No. 38.)

Commercial Fertilizers: Composition and Use. By Edward B. Voor-

hees, M. A. Pp. 24. (Farm. Bul. No. 44.) Sheep Feeding. By John A. Craig. Pp. 24. (Farm. Bul. No. 49.) Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S. Pp. 40, figs. 22. (Farm. Bul. No. 54.) Revised.

Asparagus Culture. By R. B. Handy. Pp. 40, figs. 17. (Farm.

Bul. No. 61.)

Experiment Station Work—II. Pp. 32, figs. 7. (Farm. Bul. No.

65.)

Experiment Station Work—IV. Prepared in the Office of Experment Stations. Pp. 32, figs. 3. (Farm. Bul. No. 73.)

Corn Culture in the South. By S. M. Tracy, M. S. Pp. 24. (Farm.

Bul. No. 81.)

Experiment Station Work-VIII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 6. (Farm. Bul. No. 87.)

Potato Diseases and Their Treatment. By B. T. Galloway.

figs. 4. (Farm. Bul. No. 91.)

Good Roads for Farmers. By Maurice O. Eldridge. Pp. 47, figs. 49. (Farm. Bul. No. 95.)

Raising Sheep for Mutton. By Charles F. Curtiss. Pp. 48. figs. 18.

(Farm. Bul. No. 96.)

Breeds of Dairy Cattle. By Henry E. Alvord, C. E. Pp. 48, figs. 21. (Farm. Bul. No. 106.)

The Farmers' Interest in Good Seed. By A. J. Pieters.

figs, 7. (Farm. Bul. No. 111.)

Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farm. Bul. No. 112.)

The Apple and How to Grow It. By G. B. Brackett, Pomologist.

Pp. 32, figs. 10. (Farm. Bul. No. 113.)

Experiment Station Work—XIV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 28, figs. 5. (Farm. Bul. No. 114.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Psychrometric Tables for Obtaining the Vapor Pressure, Relative Humidity, and Temperature of the Dew Point. From Readings of the Wet and Dry Bulb Thermometers. Prepared under directon of Willis L. Moore, Chief of Weather Bureau. By C. F. Marvin, Professor of Meteorology. Pp. 84, figs. 2. (W. B. No. 235.) Price 10 cents.

Anemometer. A circular of general information respecting the theory and operation of instruments for indicating, measuring, and automatically recording wind movement and direction, with instructions for the erection and care of such instruments of the Weather Bureau pattern. By C. F. Marvin, Professor of Meteor-Prepared under direction of Willis L. Moore, Chief, U.S. Weather Bureau. Pp. 67, figs. 28. (Circular D, Instrument Division.) Second edition.

Monthly Weather Review. November, 1900. Vol. XXVIII, No.

Pp. 477-525, pls. 2, charts 10. Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1900), reporting temperature and rainfall, with special reference to their effect on crops. (No. 32 for the month of

December.)

Snow and Ice Bulletin for Wednesday, January 2, and Tuesdays, January 8, 15, 22, and 29. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

### PUBLICATIONS NOT AVAILABLE.

(All of the following papers are reprints from the Annual Report.)

Report of the Assistant Secretary Upon the Purchase and Distribution of Seeds for 1900. By J. H. Brigham. Pp. iii, 3-6.

Report of the Chemist for 1900. By H. W. Wiley. Pp. ii, 17-26. Report of the Untomologist for 1900. By L. O. Howard. Pp. iii, 27 - 34.

Report of the Acting Chief of the Division of Biological Survey for 1900. By T. S. Palmer. Pp. ii, 35-48.

Report of the Chief of the Division of Vegetable Physiology and Pathology for 1900. By B. T. Galloway. Pp. ii, 49-58.

Report of the Acting Pomologist for 1900. By Wm. A. Taylor. Pp. ii, 59-63.

Report of the Agrostologist for 1900. By F. Lamson-Scribner. Pp. iii, 83-90.

Report of the Botanist for 1900. By Frederick V. Coville. 91-101.

Report of the Forester for 1900. By Gifford Pinchot. 103-110.

Report of the Librarian for 1900. By W. P. Cutter. Pp. ii, 111-112. Report of the Editor for 1900. By Geo. Wm. Hill. Pp. iii, 113-164. Report of the Director of the Office of Experiment Stations for 1900. By A. C. True. Pp. ii, 165–210.

Report of the Chief of the Bureau of Animal Industry for 1900. By D. E. Salmon. Pp. ii, 211–231.

Report of the Chief of the Division of Accounts and Disbursements for 1900. By F. L. Evans. Pp. iii, 233–263.

Report of the Chief of the Section of Foreign Markets for 1900. By Frank H. Hitchcock. Pp. iii, 265-272.

Report on the Gardens and Grounds for 1900. By B. T. Galloway. Pp. ii, 273–278.

Report of the Director of the Office of Public Road Inquiries for 1900. By Martin Dodge. Pp. ii, 279-291.

Approved: Jos. A. ARNOLD, JAMES WILSON, Acting Chief. Secretary of Agriculture.

This circular will be sent regularly to all who apply for it. No. 406.

## United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., February 28, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[February, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Foreign Markets for American Agricultural Products. Testimony of Frank H. Hitchcock, Chief of the Section of Foreign Markets, before the Industrial Commission. Pp. 53. (Report No. 67.) Price 5 cents.

The Sunflower Plant: Its Cultivation, Composition, and Uses. By Harvey W. Wiley, Chief of the Division of Chemistry, Pp. 31, pl. 1, figs. 2. (Bulletin No. 60, Division of Chemistry.) Price 5 cents.

A report on the cultivation and uses of the sunflower in the United States and other countries.

Nutrition Investigations at the University of Illinois, North Dakota Agricultural College, and Lake Erie College, Ohio, 1896 to 1900. By H. S. Grindley and J. L. Sammis, E. F. Ladd, and Isabel Bevier and Elizabeth C. Sprague. Pp. 42. (Bulletin No. 91, Office of Experiment Stations.) Price 5 cents.

Irrigation Laws of the Northwest Territories of Canada and Wyoming, with Discussions by J. S. Dennis, Deputy Commissioner of Public Works, Canada, and Fred. Bond, State Engineer of Wyoming, and J. M. Wilson, Agent and Expert, Irrigation Investigations, Office of Experiment Stations. Pp. 90, frontispiece, pls. 5. (Bulletin No. 96, Office of Experiment Stations.) Price 10 cents.

Texts of the irrigation laws of the northwest territories of Canada and Wyoming, with the regulations, forms, and methods of procedure adopted in the administration of these laws, and discussion of the principles underlying the laws and the methods followed in their enforcement.

Our Foreign Trade in Agricultural Products, 1891–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 61. (Bulletin No. 23, Section of Foreign Markets.) Price 5 cents.

Accessions to the Department Library, October-December, 1900. Pp. 28. (Library Bulletin No. 34.) Price 5 cents.

Wakker's Hyacinth Germ, Pseudomonas hyacinthi (Wakker). By Erwin F. Smith, in Charge of Laboratory of Plant Pathology. Pp. 45, pl. 1, figs. 6. (Bulletin No 26, Division of Vegetable Physiology and Pathology.) Price 5 cents.

A report on the bacterial disease of hyacinths, commonly known as the "yellow disease" or "Wakker's disease."

- Crop Reporter. Vol. 2, No. 9. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

  A three-column quarto publication devoted to agricultural topics.
- The Grasses in Elliott's "Sketch of the Botany of South Carolina and Georgia." By F. Lamson-Scribner, Agrostologist. Pp. 12, figs. 4. (Circular No. 29, Division of Agrostology.)

Notes on Stephen Elliott's Collection of Grasses.

- Officials, Associations, and Educational Institutions Connected with the Dairy Interests of the United States for the Year 1901. By Henry E. Alvord, Chief of Dairy Division. Pp. 8. (Circular No. 33, Bureau of Animal Industry.)
- Directions for the Destruction of Prairie Dogs. By C. Hart Merriam, Chief, Biological Survey. Pp. 2. (Circular No. 32, Division of Biological Survey.)

Directions for the preparation and use of poisoned grain for the destruction of prairie dogs and necessary cautions against careless handling of the poisons.

- Monthly List of Publications, January, 1901. Pp. 4. (No. 404, Division of Publications.)
- The Best Horse-Radish Varieties of Europe, and Methods of Cultivation. By David G. Fairchild, Agricultural Explorer. Pp. 8, figs. 4. (Circular No. 1, Section of Seed and Plant Introduction.)
- Estimates of Russian Crops. By E. T. Peters. Pp. 11, map. (Circular No. 14, Division of Statistics.)

### REPRINTS.

- North American Fauna No. 16. Results of a Biological Survey of Mount Shasta, California. By C. Hart Merriam, Chief of Division of Biological Survey. Pp. 179, pls. 5, figs. 46. Price 20 cents.
- The Use of Water in Irrigation in Wyoming and its Relation to the Ownership and Distribution of the Natural Supply. By B. C. Buffum, M. S., Professor of Agriculture and Horticulture, University of Wyoming, and Vice-Director of Wyoming Agricultural Experiment Station. Pp. 56, pls. 8. (Bulletin No. 81, Office of Experiment Stations.) Price 10 cents.
- Cooperative Grass and Forage Plant Investigations with State Experiment Stations. By Thomas A. Williams, In charge of Experimental Work. Pp. 16. (Circular No. 8. Office of the Secretary.) Revised edition.
- Directions for the Use of Blackleg Vaccine. By Victor A. Nörgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry.) Second revision.
- Third Report of Committee of the Association of American Agricultural Colleges and Experiment Stations on Methods of Teaching Agriculture. Pp. 7. (Circular No. 39, Office of Experiment Stations.)

Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands. By Gifford Pinchot, Forester. Pp. 5. (Circular No. 21, Division of Forestry.)

## FARMERS' BULLETINS.

Protection of Food Products from Injurious Temperatures. By H. E. Williams, Chief Clerk, Weather Bureau. Pp. 26. (Farmers' Bulletin No. 125.)

Contains information regarding the temperatures that are injurious to food products and other perishable articles, under different conditions and during shipment, and suggests methods of protecting the same from extremes of heat and cold.

#### REPRINTS.

- Peach Yellows and Peach Rosette. By Erwin F. Smith, Special Agent, under the direction of B. T. Galloway, Chief of the Division of Vegetable Pathology. Pp. 20, figs. 7. (Farmers' Bulletin No. 17.)
- Fowls: Care and Feeding. By G. C. Watson, B. Agr, M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)
- Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)
- The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted, with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.) Pp. 24. (Farmers' Bulletin No. 55.)
- Farmer's Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)
- Sheep, Hogs, and Horses in the Pacific Northwest. I. Sheep Husbandry, by James Withycombe, V. S., Vice-Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III. The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Meteorological Chart of the Great Lakes. Summary for the Season of 1900. By Alfred J. Henry and Norman B. Conger. Vol. III, No. 10. Pp. 23, charts 14. (W. B. No. 237.)

Monthly Weather Review. December, 1900. Vol. XXVIII, No. 12. Pp. 527–583, pl. 1, charts 10. Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (No. 1 for the month of January.)

Snow and Ice Bulletin for Tuesdays, February 5, 12, 19, and 26. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

### PUBLICATIONS NOT AVAILABLE.

Agricultural Resources and Capabilities of Porto Rico. By Prof. S. A. Knapp, Special Agent in Charge of Agricultural Investigations in Porto Rico. Pp. 32, pls. 7. (House Doc. No. 171, 56th Cong., 2d sess.)

Letter from the Secretary of Agriculture, Presenting a Detailed Statement of Expenditures for the Department for the Year Ending June 30, 1900. Pp. 247. (House Doc. No. 29, 56th Cong., 2d sess.)

Irrigation Investigations in California. Under the direction of Elwood Mead, Expert in Charge of Irrigation Investigations of the Office of Experiment Stations, U. S Department of Agriculture, assisted by William E. Smythe, Marsden Manson, J. M. Wilson, Charles D. Marx, Frank Soulé, C. E. Grunsky, Edward M. Boggs, and James D. Schuyler. Pp. 73. (Senate Doc. No. 108, 56th Cong., 2d sess.

Approved:

JAMES WILSON,

Secretary of Agriculture.

GEO. WM. HILL, Editor and Chief. This circular will be sent regularly to all who apply for it.

No. 408.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., March 30, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[March, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Catalase, A New Enzym of General Occurrence, with Special Reference to the Tobacco Plant. By Oscar Loew, Division of Vegetable Physiology and Pathology, detailed to the Division of Soils. Pp. 47. (Report No. 68.) Price 5 cents.

Sixteenth Annual Report of the Bureau of Animal Industry for the year 1899. Pp. 790, pls. 41, figs. 45. Price, cloth, 85 cents.

CONTENTS: Report of the Chief of the Bureau—Experiments with Texas fever and Southern cattle ticks-Some examples of the development of knowledge concerning animal diseases-Administrative work of the Federal Government in relation to the animal industry—International congress for the consideration of the best methods for checking or curing tuberculosis—Second outbreak of maladie du coït in Nebraska—Culture media for biochemic investigations— A report upon an examination of milk—Report upon experimental exports of butter, 1898–99—Dairy development in the United States—Notes upon dairying in California and the exports of California butter to the Orient—Statistics of oleomargarine, oleo oil, and filled cheese-Foreign markets for eggs and poultry —Disposition of dead animals in foreign cities—Hog raising in the South—The manufacture and exportation of tasajo, or jerked beef, by the River Plata countries—Trade of Porto Rico in animals and animal products—Imports of animals and animal products into the United Kingdom-Imports and exports of animals and animal products-Number of live stock in foreign countries—Some agricultural experiment station work—Contagious diseases of animals in foreign countries—The seventh international veterinary congress—Notes on parasites—Our present knowledge of the kidney worm (Sclerostoma pinguicola) of swine—The nature, cause, and economic importance of ovine caseous lymph-adenitis—Notes on the animal industry of Porto Rico-Numbers and values of farm animals, 1899-The world's wool clip, 1899-Farm animals and the markets—Rules and regulations of the Bureau of Animal Industry issued in 1899—Laws for the control of contagious diseases of animals— Miscellaneous information.

This is a Congressional publication, and but a limited number is assigned to the Department, the remainder being for distribution by Senators, Representa-

tives, and Delegates in Congress.

Pure-Food Laws of European Countries Affecting American Exports. Prepared under the direction of H. W. Wiley, Chief Chemist of the U. S. Department of Agriculture, by W. D. Bigelow, Second Assistant Chemist. Pp. 39. (Bulletin No. 61, Division of Chemistry.) Price 5 cents.

A brief summary of the most important points of the law regulating the sale of food products in foreign countries.

The Reservoir System of the Cache La Poudre Valley. By E. S. Nettleton. Pp. 48, pls. 14. (Bulletin No. 92, Office of Experiment Stations.) Price 15 cents.

A description of the reservoir system of the Cache La Poudre Valley, showing the benefits to be derived from the construction of reservoirs for the storage of water for irrigation.

Experiment Station Record, Vol. XII, No. 6. Pp. vi, 501-600. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

The Imperial German Meat Inspection Law. In English and German. Pp. 19. (Circular No. 32, Bureau of Animal Industry.)

New or Little Known Grasses. By F. Lamson-Scribner, Agrostologist. Pp. 8. (Circular No. 30, Division of Agrostology.)

Descriptions of new or little known grasses which have appeared in recent collections from several sources.

Practical Assistance to Tree Planters. By Gifford Pinchot, Forester. Pp. 12, figs. 5. (Circular No. 22, Division of Forestry.) Revised edition.

Monthly List of Publications, February, 1901. Pp. 4. (No. 406, Division of Publications.)

Crop Reporter. Vol. 2, No. 10. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.

#### REPRINTS.

Sheep and Wool: A Review of the Progress of American Sheep Husbandry. By J. R. Dodge, Special Agent. Pp. 63, figs. 3. (Report No. 66.) Price 5 cents.

Information Concerning the Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 94, frontispiece, pls. 17, fig. 1. (Bulletin No. 27, Bureau of Animal Industry.) Price 15 cents. Experiment Station Record, Vol. XII, No. 2.

Pp. vi, 101–200,

figs. 3. Price 10 cents.

Experiment Station Record, Vol. XII, No. 3. Pp. viii, 201–300. Price 10 cents.

Experiment Station Record, Vol. XII, No. 4. Pp. vi, 301–400, fig. 1. Price 10 cents.

Experiment Station Record, Vol. XII, No. 5. Pp. vi, 401-500.

Price 10 cents.

Agricultural Exports of the United States, by Countries, 1895–1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 88. (Bulletin No. 20, Section of Foreign Markets.) Price 10 cents.

Agricultural Imports of the United States, by Countries, 1895–1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 74. (Bulletin No. 21, Section of Foreign Markets.) Price 5 cents.

The Harlequin Cabbage Bug, or Calico Back (Murgantia histrionica Hahn). By L. O. Howard, Entomologist. Pp. 2, fig. 1. (Circular No. 10, second series, Division of Entomology.)

The Strawberry Weevil (Anthonomus signatus Say). By F. H. Chittenden, Assistant Entomologist. Pp. 7, figs. 4. (Circular

No. 21, second series, Division of Entomology.)

The Periodical Cicada in 1897. By E. A. Schwarz, Assistant, Division of Entomology. Pp. 4. (Circular No. 22, second series, Division of Entomology.)

How to Distinguish the Different Mosquitoes of North America. By L. O Howard, Entomologist. Pp. 8, figs. 3. (Circular No.

40, second series, Division of Entomology.)

Regulations of Foreign Governments Regarding Importation of American Plants, Trees, and Fruits. By L. O. Howard, Entomologist Pp. 4. (Circular No. 41, second series, Division of Entomology.)

Agricultural Imports and Exports, 1896–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 16. (Circular No.

23, Section of Foreign Markets.)

Notes on Parasites—50-52. By Ch. Wardell Stiles, Ph. D., Zoologist, Bureau of Animal Industry, and Albert Hassall, M. R. C. V. S., Acting Assistant Zoologist, Bureau of Animal Industry. Pp. 558-611, pls. 2, figs. 7. (Reprinted from Sixteenth Annual

Report of the Bureau of Animal Industry, 1899.)

The Nature, Cause, and Economic Importance of Ovine Caseous Lymph-Adenitis. By Victor A. Nörgaard, V. S. (Copenhagen), Chief of Pathological Division, Bureau of Animal Industry, and John R. Mohler, V. M. D., Acting Assistant Chief of Pathological Division, Bureau of Animal Industry. Pp. 638–662, pls. 7. (Reprinted from Sixteenth Annual Report of the Bureau of Animal Industry, 1899.)

Notes on the Animal Industry of Porto Rico. By O. F. Cook, Special Agent, Division of Botany. Pp. 663–667, pls. 10. (Reprinted from Sixteenth Annual Report of the Bureau of Animal

Industry, 1899.)

Agricultural Resources and Capabilities of Porto Rico. By Prof. S. A. Knapp, Special Agent in Charge of Agricultural Investigations in Porto Rico. Pp. 32, pls. 7. (House Doc. No. 171, 56th Cong., 2d sess.)

FARMERS' BULLETINS.

Experiment Station Work—XVII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 124.)

CONTENTS: Distilled drinking water—Soil inoculation—Treatment of sandy soils—Lime as a fertilizer—Fertilizers for market-garden crops—Pecan culture—Weed destruction—Maple sirup and sugar—Value of cotton seed—Alfalfa silage—Forage crops for pigs—Grazing steers—Type of the dairy cow.

Important Insecticides: Directions for their Preparation and Use. (A Revision of Farmers' Bulletin No. 19.) By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 42, figs. 6. (Farmers' Bulletin No. 127.)

Brief directions concerning a few of the insecticide agents having the widest range and attended with the greatest usefulness, economy, and ease of application.

REPRINTS.

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 32. (Farmers' Bulletin No. 22.) Revised.

Foods: Nutritive Value and Cost. By W. O. Atwater, Ph. D., Professor of Chemistry in Wesleyan University. Pp. 32. (Farm-

ers' Bulletin No. 23.)

Weeds: And How to Kill Them. By Lyster H. Dewey, Assistant

Botanist. Pp. 32, figs. 11. (Farmers' Bulletin No. 28.)

Meats: Composition and Cooking. By Chas. D. Woods, Office of Experiment Stations. Pp. 29, figs. 4. (Farmers' Bulletin No. 34.)
Bee Keeping. By Frank Benton, M. S., Assistant Entomologist.

Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)

Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)

Milk as Food. Prepared in the Office of Experiment Stations. Pp.

39, charts 2. (Farmers' Bulletin No. 74.)
The Liming of Soils. By H. J. Wheeler, Ph. D., Chemist of the Rhode Island Agricultural Experiment Station. Pp. 20. (Farmers' Bulletin No. 77.)

Experiment Station Work—VII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 8. (Farmers' Bulletin No. 84.)

Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)

Hog Raising in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40.

(Farmers' Bulletin No. 100.)

Experiment Station Work—XII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 4. (Farmers' Bulletin No. 105.)

### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review. Annual summary, 1900. Vol. XXVIII, No. 13. Pp. x, 585–599, charts 7. Price 10 cents.

Monthly Weather Review. January, 1901. Vol. XXIX, No. 1. Pp. 1-47, pls. 2, charts 10. Price 10 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (No. 2 for the month of February.)

Snow and Ice Bulletin for Tuesdays, March 5, 12, 19, and 26. (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected voluntary

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

### PUBLICATION NOT AVAILABLE.

Operations of the Bureau of Animal Industry. Message from the President of the United States transmitting a report by the Secretary of Agriculture of the operations of the Bureau of Animal Industry of that Department for the fiscal year ended June 30, 1900. Pp. 84. (Senate Doc. No. 96, 56th Cong., 2d session.)

> GEO. WM. HILL. Editor and Chief.

Approved:

JAMES WILSON, Secretary of Agriculture. This circular will be sent regularly to all who apply for it.

## United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., April 30, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[April, 1901.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Legislation with Reference to Bovine Tuberculosis, Being a Digest of the Laws Now in Force and a Transcript of the Laws, Rules, and Regulations, and Proclamations for the Several States and Territories. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 173. (Bulletin No. 28, Bureau of Animal Industry.) Price 10 cents.

The Stock-Poisoning Plants of Montana. A Preliminary Report by V. K. Chesnut and E. V. Wilcox. Pp. 150, frontispiece, pls. 36. (Bulletin No. 26, Division of Botany.) Price 25 cents.

Result of an investigation undertaken at the request of the State board of sheep commissioners. It contains a detailed account of the investigations and experiments, and concise summaries of symptons, treatment, and remedies. Printed by authority of Congress, and copies may be obtained by applying to Senators, Representatives, and Delegates.

Bibliography of the More Important Contributions to American Economic Entomology. Part VII. The More Important Writings Published Between December 31, 1896, and January 1, 1900. Prepared under the direction of the Entomologist by Nathan Banks, Assistant. Pp. 113. Price, cloth, 20 cents.

Organization Lists of the Agricultural Colleges and Experiment Stations in the United States, with a List of Agricultural Stations in Foreign Countries. Pp. 134. (Bulletin No. 88, Office of Experiment Stations.) Price 10 cents.

Irrigation in Hawaii. By Walter Maxwell, Ph. D., Director and Chief Chemist, Hawaiian Experiment Station. Pp. 48, pls. 6, figs. 3. (Bulletin No. 90, Office of Experiment Stations.) Price 10 cents.

It discusses the climatic, soil, and other conditions as affecting irrigation in Hawaii, and gives the results of irrigation experiments, especially with sugar cane, carried on by the author for a number of years.

A Report on the Work and Expenditures of the Agricultural Experiment Stations for the Year Ended June 30, 1900. By A. C. True, Director of the Office of Experiment Stations. Pp. 181, pls. 8. (Bulletin No. 93, Office of Experiment Stations.) Price 15 cents.

- Fourth Report on the Agricultural Investigations in Alaska, 1900. By C. C. Georgeson, M. S., Special Agent in Charge of Alaska Investigations. Pp. 83, pls. 24. (Bulletin No. 94, Office of Experiment Stations.) Price 20 cents.
- Report on the Agricultural Resources and Capabilities of Hawaii. By Wm. C. Stubbs, Ph. D., Director Louisiana Agricultural Experiment Stations. Pp. 100, frontispiece, pls. 27. (Bulletin No. 95, Office of Experiment Stations.) Price 20 cents.
- Experiment Station Record, Vol. XII, No. 7. Pp. vi, 601–700, figs. 4. Price 10 cents.
- Experiment Station Record, Vol. XII, No. 8. Pp. vi, 701–800. Price 10 cents.
- Experiment Station Record, Vol. XII, No. 9. Pp. vii, 801–900. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per vol-

ume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

- Crop Reporter. Vol. 2, No. 11. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.
- Crop Reporter. Vol. 2, No. 12. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- Bermuda Grass. By A. S. Hitchcock, Assistant Agrostologist. Pp. 6, figs. 2. (Circular No. 31, Division of Agrostology.)
- Some Arizona Grasses. By Elmer D. Merrill, Assistant in Charge of Collections. Pp. 10. (Circular No. 32, Division of Agrostology.)

  Descriptions of a number of Arizona grasses.
- Range Grass and Forage Plant Experiments at Highmore, S. Dak.— Report of Progress. By F. Lamson-Scribner, Agrostologist. Pp. 5. (Circular No. 33, Division of Agrostology.)
- Notes on Parasites—55–57. By Ch. Wardell Stiles, Ph. D., Zoologist, and Albert Hassall, M. R. C. V. S., Acting Assistant Zoologist, Bureau of Animal Industry. Pp. 4. (Circular No. 34, Bureau of Animal Industry.)
- Protection of Birds and Game. Directory of State Officials and Organizations for 1901. Pp. 10. (Circular No. 33, Division of Biological Survey.)
- Monthly List of Publications, March, 1901. Pp. 4. (No. 408, Division of Publications.)

## REPRINTS.

- Cultivation of Tobacco in Sumatra. By Emile Mulder. Pp. 39, map, figs. 3. (Report No. 58.) Price 5 cents.
- Curing and Fermentation of Cigar Leaf Tobacco. By Oscar Loew, of the Division of Vegetable Physiology and Pathology. Pp. 34. (Report No. 59.) Price 5 cents.

- National and State Dairy Laws. Compiled and abstracted by R. A Pearson, M. S., Assistant Chief of Dairy Division. Pp. 110. (Bulletin No. 26, Bureau of Animal Industry.) Price 10 cents.
- Destructive Locusts. A Popular Consideration of a Few of the More Injurious Locusts (or "Grasshoppers") of the United States, Together with the Best Means of Destroying Them. By C. V. Riley, M. A., Ph. D., Entomologist. Pp. 62, map, pls. 12, figs. 11. (Bulletin No. 25, old series, Division of Entomology.) Price 15 cents.
- The Seventh International Veterinary Congress. By Victor A. Nörgaard, V. S., Chief of Pathological Division, Bureau of Animal Industry. Pp. 534–557. (Reprint from Sixteenth Annual Report of the Bureau of Animal Industry, 1899.)
- The Carpet Beetle, or "Buffalo Moth." (Anthrenus scrophulariæ L.) Pp. 4, fig. 1. (Circular No. 5, second series, Division of Entomology.)
- Mosquitoes and Fleas. By L. O. Howard, Entomologist. Pp. 6. (Circular No. 13, Second Series, Division of Entomology.)
- Every Farm an Experiment Station. By Ervin E. Ewell, First Assistant, Division of Chemistry. (Reprint from Yearbook of Department of Agriculture for 1897.) Pp. ii, 291–304.
- Rabies: Its Cause, Frequency, and Treatment. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 211–246. (Reprinted from Yearbook of Department of Agriculture for 1900.)

## FARMERS' BULLETINS.

Practical Suggestions for Farm Buildings. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)

Contains plans and specifications for inexpensive farm buildings, both dwellings and barns, and suggestions relating thereto.

Eggs and Their Uses as Food. By C. F. Langworthy, Ph. D. Prepared under the Supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32. (Farmers' Bulletin No. 128.)

Description and composition of eggs and their uses as food.

The Mexican Cotton-Boll Weevil. By Frederick W. Mally, M. Sc., Professor of Entomology, Agricultural and Mechanical College, College Station, Texas. Pp. 30, figs. 4. (Farmers' Bulletin No. 130.)

Life history and habits of the Mexican cotton-boll weevil and the most practicable methods for destroying the pest.

Sweet Potatoes. By D. M. Nesbit. Pp. 40. (Farmers' Bulletin No. 129.)

Contains information in relation to the propagation of plants, preparation of land, planting, cultivation, harvesting, shipping, marketing, storing, cooking, exportation, feeding value, and diseases and insect enemies of sweet potatoes.

#### REPRINTS.

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)

- Sweet Potatoes: Culture and Uses. By J. F. Duggar, M. S., Professor of Agriculture, Agricultural and Mechanical College of Alabama. Pp. 32, figs. 4. (Farmers' Bulletin No. 26.) Revised.
- Grape Diseases on the Pacific Coast. By Newton B. Pierce, Division of Vegetable Physiology and Pathology. Pp. 15, figs. 3. (Farmers' Bulletin No. 30.)
- Peach Growing for Market. By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 24, figs. 21. (Farmers' Bulletin No. 33.)
- Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)
- Farm Drainage. By C. G. Elliott, C. E., Member of the American Society of Civil Engineers, Peoria, Ill. Pp. 24, figs. 6. (Farmers' Bulletin No. 40.) Revised.
- Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)
- Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29. figs. 8. (Farmers' Bulletin No. 42.)
- Some Insects Injurious to Stored Grain. By F. H. Chittenden, Assistant Entomologist. Pp. 24, figs. 18. (Farmers' Bulletin No. 45.) Revised edition.
- Irrigation in Humid Climates. By F. H. King, Professor of Agricultural Physics, College of Agriculture, University of Wisconsin, and Physicist of the Wisconsin Agricultural Experiment Station. Under the Supervision of the Office of Experiment Stations. Pp. 27, figs. 4. (Farmers' Bulletin No. 46.)
- The Sugar Beet: Culture, Seed Development, Manufacture, and Statistics. By H. W. Wiley, Chief of the Division of Chemistry, and formerly Director of the Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. (Farmers' Bulletin No. 52.)
- Asparagus Culture. By R. B. Handy, Division of Publications. Pp. 40, figs. 17. (Farmers' Bulletin No. 61.)
- Marketing Farm Produce. By George G. Hill, formerly Manager and Editor of The American Farmer, Illinois. Pp. 28, figs. 7. (Farmers' Bulletin No. 62.)
- Meadows and Pastures: Formation and Cultivation in the Middle Eastern States. By Jared G. Smith, Assistant Agrostologist. Pp. 28, figs. 9. (Farmers' Bulletin No. 66.) Revised edition.
- Forestry for Farmers. By B. E. Fernow, Chief of the Division of Forestry. (Reprinted from the Yearbooks of the U. S. Department of Agriculture for 1894 and 1895.) Pp. 48, figs. 15. (Farmers' Bulletin No. 67.)
- Farmers' Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey. Pp. 20. (Farmers' Bulletin No. 109.)

- The Grain Smuts: How They are Caused and How to Prevent Them. By Walter T. Swingle, Special Agent, Division of Vegetable Physiology and Pathology. Pp. 20, figs. 8. (Farmers' Bulletin No. 75.)
- Tomato Growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)
- Experiment Station Work—VI. Prepared in the Office of Experiment Stations. Pp. 28, figs. 2. (Farmers' Bulletin No. 79.)
- Cowpeas. By Jared G. Smith, Assistant Agrostologist. Pp. 16, fig. 1. (Farmers' Bulletin No. 89.)
- Experiment Station Work—IX. Prepared in the Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 92.)
- Three Insect Enemies of Shade Trees. By L. O. Howard, Ento-mologist. Reprinted with some annotations by the author, from the Yearbook of the Department of Agriculture for 1895.) Pp. 30, figs. 11. (Farmers' Bulletin No. 99.)
- Southern Forage Plants. Compiled from the publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)
- Notes on Frost. By E. B. Garriott, Professor of Meteorology, Weather Bureau. Pp. 24. (Farmers' Bulletin No. 104.)
- Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)
- Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)
- The Apple and How to Grow It. By G. B. Brackett, Pomologist. Pp. 32, figs. 10. (Farmers' Bulletin No. 113.)
- Irrigation in Fruit Growing. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Experiment Station. Pp. 48, figs. 8. (Farmers' Bulletin No. 116.)
- Grape Growing in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 32, figs. 6. (Farmers' Bulletin No. 118.)
- Experiment Station Work—XV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 31, figs. 5. (Farmers' Bulletin No. 119.)
- Beans, Peas, and Other Legumes as Food. By Mary Hinman Abel. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 10. (Farmers' Bulletin No. 121.)

Experiment Station Work—XVI. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 122.)

## PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

- Report of the Chief of the Weather Bureau. 1899–1900. Part II. Climatology. Hourly averages of Atmospheric Pressure, Temperature, and Wind from the Records of Automatic Instruments at Twenty-eight Stations. Pp. 17–71.
- Report of the Chief of the Weather Bureau. 1899–1900. Part III. Climatology. Monthly and Annual Meteorological Summaries. Pp. 73–161.
- Report of the Chief of the Weather Bureau. 1899–1900. Part IV. Climatology. Monthly and Annual Mean Temperature and Annual Extremes of Temperature, Together with the Dates of First and Last Killing Frost, 1899. Pp. 163–199.
- Report of the Chief of the Weather Bureau. 1899–1900. Part V. Climatology. Monthly and Annual Precipitation, 1899–1900. All stations. Pp. 201–258.
- Report of the Chief of the Weather Bureau. 1899–1900. Part VI. Climatology. Miscellaneous Meteorological Tables and Reports. Pp. 259–347.
- Report of the Chief of the Weather Bureau. 1899–1900. Part VII. Meteorological Observations of the Second Wellman Expedition, by Evelyn B. Baldwin, Observer, Weather Bureau. Pp. 349–436.
- Monthly Weather Review. February, 1901. Vol. XXIX, No. 2. Pp. 49-97, pls. 5, charts 13, figs. 10. Price 20 cents.
- Barometers and the Measurement of Atmospheric Pressure. By C. F. Marvin, Professor of Meteorology. Prepared under direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 94, figs. 23. (Circular F, Instrument Division, Weather Bureau.) Second edition. Price 15 cents.

## Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (No. 3 for the month of March and Nos. 4, 5, 6, and 7 for April, 1901.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

Approved:

JAMES WILSON,

Secretary of Agriculture.

GEO. WM. HILL, Editor and Chief.

## NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U.S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and

the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and

other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Year-book usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents,

and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for dis-

tribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the Superintendent of Documents, Union Building, Washington, D. C., and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than one copy of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

and self

i de la companya de l

T.e.

el Sel Cerrie

State 14

(/ 6

The state of the s

Environd to the City of Published St. Commission of the City of th

110

This circular will be sent regularly to all who apply for it.

No. 415.

## United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., May 31, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[May, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Yearbook of the U.S. Department of Agriculture, 1900. Pp. 888, frontispiece, pls. 87, figs. 88.

As provided by law, the first part consists of the annual report of the Secre-

tary of Agriculture.

The second part contains thirty-one articles, five more than last year. While the Yearbook for 1900 is not specially devoted to a review of the several Divisions, it is distinctively representative of the work of the Department. With the exception of two articles prepared in the Division of Publications, every article covers some important line of work carried on in the Bureau, Division, or Office from which it emanated. The two articles prepared in the Division of Publications, while not relating directly to the work of the Department or to practical agriculture, will, it is believed, be found of interest to American agriculturists.

The appendix contains the directory of the Department, the directory of colleges and experiment stations, lists of State officials in charge of agriculture, secretaries of State agricultural societies, officers of various agricultural and kindred associations, statistics of farm crops, and other information of interest to the

A new feature of the appendix is the publication of requirements for admission to the agricultural departments of the land-grant colleges, and the cost of

The small quota (only 6 per cent) of this publication assigned to this Department is insufficient to supply even its regular correspondents and coworkers, and miscellaneous applicants are therefore respectfully referred to their Senators, Representatives, and Delegates in Congress, to whom the other 94 per cent is allotted for distribution. The Superintendent of Documents has them for sale at 75 cents per copy.

(Illustrated.) By F. Lamson-Scribner, American Grasses—II. Agrostologist. Pp. 349, figs. 325. (Bulletin No. 17, Division of Agrostology.) Revised edition. Price 20 cents.

Shade in Coffee Culture. By O. F. Cook, Special Agent for Tropical Agriculture. Pp. 79, pls. 16. (Bulletin No. 25, Division of Botany.) Price 15 cents.

Results of personal observation and of a careful study of the literature relating to the much discussed question of the shading of the coffee tree.

Proceedings of the Seventeenth Annual Convention of the Association of Official Agricultural Chemists, Held at Washington, D. C., November 16, 17, and 19, 1900. Edited by Harvey W. Wiley, Secretary of the Association. Pp. 163. (Bulletin No. 62, Division of Chemistry.) Price 10 cents.

Some Insects Injurious to the Violet, Rose, and Other Ornamental Plants. A Collection of Articles Dealing with Insects of this Class. Prepared under the direction of the Entomologist, by F. H. Chittenden, Assistant Entomologist. Pp. 114, pls. 4, figs. 29. (Bulletin No. 27, new series, Division of Entomology.) Price 10 cents.

- Statistics of the Land-Grant Colleges and Agricultural Experiment Stations in the United States for the Year Ended June 30, 1900. Pp. 37. (Bulletin No. 97, Office of Experiment Stations.) Price 5 cents.
- Experiment Station Record, Vol. XII, No. 10. Pp. vii, 901-1000. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

Accessions to the Department Library. January-March, 1901. Pp. 29. (Library Bulletin No. 35.) Price 5 cents.

- Soil Solutions: Their Nature and Functions, and the Classifications of Alkali Lands. By Frank K. Cameron, Soil Chemist, Division of Soils. (Cooperating with the Division of Chemistry.) Pp. 37. (Bulletin No. 17, Division of Soils.) Price 5 cents.
- The Cotton Crop of 1899–1900. By James L. Watkins, Division of Statistics. Pp. 46. (Bulletin No. 19, miscellaneous series, Division of Statistics.) Price 5 cents.
- Crop Reporter. Vol. 3, No. 1. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- Aristida Purpurea Nutt., and Its Allies. By Elmer D. Merrill, Assistant in Charge of Collections. Pp. 8. (Circular No. 34, Division of Agrostology.)

An attempt to correlate the old species and varieties.

- List of Publications of the Division of Botany. By Frederick V. Coville, Botanist. Pp. 10. (Circular No. 30, Division of Botany.)
- Outline of Work on Foods and Feeding Stuffs for 1901. By William H. Krug, Referee on Foods and Feeding Stuffs. Pp. 3. (Circular No. 7, Division of Chemistry.)

Amended methods adopted at the seventeenth annual convention of the Association of Official Agricultural Chemists.

The Destructive Green Pea Louse (Nectarophora destructor Johns). By F. H. Chittenden, Assistant Entomologist. Pp. 8, (Circular No. 43, second series, Division of Entomology.) Description, distribution, extent of injury, method of work and methods of

control of this destructive and troublesome insect.

Agricultural Experiment Stations in the United States. By A. C. True, Director. Pp. 11. (Circular No. 44, Office of Experiment Stations.) Revised edition.

Monthly List of Publications. April, 1901. Pp. 8. (No. 410 Division of Publications.)

#### REPRINTS.

Our Foreign Trade in Agricultural Products, 1891–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 61. (Bulletin No. 23, Section of Foreign Markets.) Price 5 cents.

The Cultivated Vetches. By Jared G. Smith, Assistant Agrostologist. Pp. 8, figs. 6. (Circular No. 6, Division of Agrostology.) Revised.

Note on the Chicken Tick (Argas americanus). By Albert Hassall, M. R. C. V. S., Acting Assistant Zoologist, Bureau of Animal Industry. Pp. 496–500, pl. 1, figs. 7. (Reprinted from the Sixteenth Annual Report of the Bureau of Animal Industry, 1899.)

## FARMERS' BULLETINS.

#### REPRINTS.

- Leguminous Plants for Green Manuring and for Feeding. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 16.)
- Barnyard Manure. By W. H. Beal, of the Office of Experiment Stations. Pp. 32, fig. 7. (Farmers' Bulletin No. 21.)
- Flax for Seed and Fiber in the United States. By Chas. Richards Dodge, Special Agent for Fiber Investigations. Pp. 16. (Farmers' Bulletin No. 27.)
- Souring of Milk and Other Changes in Milk Products. Prepared in the Office of Experiment Stations. Pp. 23. (Farmers' Bulletin No. 29.)
- Cotton Seed and Its Products. Prepared in the Office of Experiment Stations. Pp. 16. (Farmers' Bulletin No. 36.)
- Insects Affecting the Cotton Plant. By L. O. Howard, Ph. D., Entomologist. (Reprinted, with revision by the Author, from Bulletin 33, Office of Experiment Stations.) Pp. 32, figs. 18. (Farmers' Bulletin No. 47.)
- The Manuring of Cotton. (Condensed from an article by H. C. White, Ph. D., in Bulletin No. 33 of the Office of Experiment Stations.) Pp. 16. (Farmers' Bulletin No. 48.)
- Sorghum as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. Pp. 20, fig. 1. (Farmers' Bulletin No. 50.) Revised.
- The Sugar Beet: Culture, Seed Development, Manufacture, and Statistics. By H. W. Wiley, Chief of the Division of Chemistry, and formerly Director of the Department Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. (Farmers' Bulletin No. 52.)
- Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under the Supervision of the Dairy Division, Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 57.)
- The Soy Bean as a Forage Crop. By Thos. A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. With an Appendix on Soy Beans as Food for Man. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 24, figs. 5. (Farmers' Bulletin No. 58.) Revised.
- Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. 9. (Farmers' Bulletin No. 63.)
- Experiment Station Work—III. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 69.)
- Some Essentials of Beef Production. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs. 17. (Farmers' Bulletin No. 71.)

The Peach Twig-Borer: An Important Enemy of Stone Fruits. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 16, figs. 5. (Farmers' Bulletin No. 80.)

Fish as Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 85.)

Thirty Poisonous Plants of the United States. By V. K. Chesnut, Assistant Botanist, U. S. Department of Agriculture. Pp. 32, figs. 24. (Farmers' Bulletin No. 86.)

The Manufacture of Sorghum Sirup. By A. A. Denton, Medicine Lodge, Kans. Pp. 32, figs. 9. (Farmers' Bulletin No. 90.)

Potato Diseases and Their Treatment. By B. T. Galloway, Chief of the Division of Vegetable Physiology and Pathology. Pp. 12, figs. 4. (Farmers' Bulletin No. 91.)

The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.)

Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted from the Report of the Bureau of Animal Industry for 1898.) Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)

Rice Culture in the United States. By Dr. S. A. Knapp. Pp. 28. (Farmers' Bulletin No. 110.)

Sheep, Hogs, and Horses in the Pacific Northwest. I. Sheep Husbandry, by James Wythycombe, V. S., Vice Director of the Oregon Experiment Station; II. Hog Raising, by Hiram T. French, M. S., Agriculturist of the Idaho Experiment Station; III. The Horse Industry, by S. B. Nelson, D. V. M., Professor of Veterinary Science in the Washington Agricultural College. Pp. 28, figs. 2. (Farmers' Bulletin No. 117.)

Grape Growing in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 32, figs. 6. (Farmers' Bulletin No. 118.)

Beans, Peas, and other Legumes as Food. By Mary Hinman Abel. Prepared under the Supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 10. (Farmers' Bulletin No. 121.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Report of the Chief of the Weather Bureau, 1899–1900. By Willis L. Moore. Pp. 436.

Monthly Weather Review, March, 1901. Vol. XXIX, No. 3. Pp. 99–143, pl. 1, charts 9. Price 20 cents.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 8, 9, 10, and 11 for May, 1901.)

Daily Weather Map showing weather conditions throughout the United

States and giving forecasts of probable changes.

GEO. WM. HILL, Editor and Chief.

Approved:

James Wilson, Secretary of Agriculture. This circular will be sent regularly to all who apply for it. No. 416.

## United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., June 29, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[June, 1901.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents. Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

- Fiscal Regulations of the Department of Agriculture, Together with Extracts from the Revised Statutes, Decisions of Courts, Rulings of the Comptrollers, Opinions of the Attorneys-General, etc. Pp. 49. (Division of Accounts.) Revised edition.
- A Forest Working Plan for Township 40, Totten and Crossfield Purchase, Hamilton County, New York State Forest Preserve. By Ralph S. Hosmer, Field Assistant, and Eugene S. Bruce, Lumberman, Division of Forestry, U. S. Department of Agriculture, Preceded by a Discussion of Conservative Lumbering and the Water Supply, by Frederick H. Newell, Hydrographer, U. S. Geological Survey. Pp. 64, frontispiece, pls. 11, maps 3. (Bulletin No. 30, Division of Forestry.) Price 25 cents.
- The Course of Prices of Farm Implements and Machinery for a Series of Years. By George K. Holmes, of the Division of Statistics. Pp. 31. (Miscellaneous series—Bulletin No. 18, Division of Statistics.) Price 5 cents.

Shows the trend of prices of agricultural implements and machinery from 1860 to July, 1900.

- Crop Reporter. Vol. 3, No. 2. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8.

  A three-column quarto publication devoted to agricultural topics.
- Agrostological Notes. By F. Lamson-Scribner, Agrostologist, and Elmer D. Merrill. Pp. 6. (Circular No. 35, Division of Agrostology.)

Some species of grasses published by S. B. Buckley, notes on *Calamovilfa*, three new species of *Panicum*, a new species of *Poa*, and some changes in nomenclature.

Canada Thistle (Carduus arvensis (L.) Robs.). By Lyster H. Dewey, Assistant Botanist. Pp. 14. figs. 4. (Circular No. 27, Division of Botany.) Revised edition.

The Functions and Uses of Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 10. (Circular No. 46, Office of Experiment Stations.)

Definitions of some of the terms used in discussing food and a statement of some principles of nutrition. The average composition of a number of the more common American food is quoted, as well as the commonly accepted dietary standards.

Monthly List of Publications. May, 1901. Pp. 4. (No. 415, Division of Publications.)

#### REPRINTS.

- The Agricultural Experiment Stations in the United States. By A. C. True and V. A. Clarke. The Paris Exposition, 1900. Prepared to Accompany the Experiment Station Exhibit. Contributed to by the Association of American Agricultural Colleges and Experiment Stations. Cloth. Pp. 636, frontispiece, pls. 153. (Bulletin No. 80, Office of Experiment Stations.) Price \$1.25.
- Notes on Parasites—55–57. By Ch. Wardell Stiles, Ph. D., Zoologist, and Albert Hassall, M. R. C. V. S., Acting Assistant Zoologist, Bureau of Animal Industry. Pp. 4. (Circular No. 34, Bureau of Animal Industry.)
- House Ants (Monomorium pharaonis, et al). By C. L. Marlatt, First Assistant Entomologist. Pp. 4, figs. 3. (Circular No. 34, second series, Division of Entomology.)
- Practical Assistance to Farmers, Lumbermen, and Others in Handling Forest Lands. By Gifford Pinchot, Forester. Pp. 5. (Circular No. 21, Division of Forestry.)
- REPRINTS FROM YEARBOOK OF U. S. DEPARTMENT OF AGRICUL-TURE FOR 1900.
- Agricultural Education in France. By C. B. Smith, of the Office of Experiment Stations. Pp iii, 115–130.
- A Directory for Farmers. Pp. 637–687.

## FARMERS' BULLETINS.

Household Tests for the Detection of Oleomargarine and Renovated Butter. By G. E. Patrick, Assistant in the Division of Chemistry. Pp. 11. (Farmers' Bulletin, No. 131.)

Description of two tests which will enable any housekeeper, with only the usual facilities of the kitchen, to distinguish in the great majority of cases between genuine butter, renovated butter, and oleomargarine.

The Principal Insect Enemies of Growing Wheat. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 40, figs. 25. (Farmer's Bulletin, No. 132.)

A condensed account of the principal insect depredators on growing wheat, discussed chiefly from the standpoint of means of control.

#### REPRINT.

Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31. (Farmers' Bulletin, No. 39.)

### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Meteorological Chart of the Great Lakes. No. 1, 1901. By Alfred J. Henry and Norman B. Conger. Prepared under direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 28, charts 4. (W. B. 244.) Price 10 cents.

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 12, 13, 14 and 15 for June, 1901.)

Daily Weather Map showing weather conditions throughout the United

States and giving forecasts of probable changes.

GEO. WM. HILL, Editor and Chief.

Approved:

James Wilson, Secretary of Agriculture.

## NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and

the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and

other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Year-book usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents, and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for dis-

tribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the Superintendent of Documents, Union Building, Washington, D. C., and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than one copy of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

This circular will be sent regularly to all who apply for it. No. 417.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

WASHINGTON, D. C., July 31, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[July, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Progress of the Beet-Sugar Industry in the United States in 1900. By Charles F. Saylor, Special Agent, and H. W. Wiley, Chemist. Pp. 178. (Report No. 69.) Price 10 cents.

American Breeds of Fowls. I.—The Plymouth Rock. By T. F. McGrew. Pp. 32, pls. 6 (colored), figs. 10. (Bulletin No. 29, Bureau of Animal Industry.) Price 15 cents.

Descriptions of the different varieties of Plymouth Rock fowls; the plumage, and standard requirements, and the methods of breeding by which these are best secured.

Contributions from the U. S. National Herbarium, Vol. VI. Plant Life of Alabama. An Account of the Distribution, Modes of Association, and Adaptations of the Flora of Alabama, Together with a Systematic Catalogue of the Plants Growing in the State. Prepared in cooperation with the Geological Survey of Alabama by Charles Mohr, Ph. D. Pp. 921, pls. 13. Price 50 cents.

The Effect of Severe and Prolonged Muscular Work on Food Consumption, Digestion, and Metabolism. By W. O. Atwater, Ph. D., and H. C. Sherman, Ph. D., and The Mechanical Work and Efficiency of Bicyclers, by R. C. Carpenter, M. S. Pp. 67, figs. 3. (Bulletin No. 98. Office of Experiment Stations.) Price 5 cents.

Result of experiments made with bicycle racers in a six-day contest at the Madison Square Garden, New York City, in December, 1898.

Proceedings of the Fourteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, Held at New Haven and Middletown, Conn., November 13–15, 1900. Edited by A. C. True and W. H. Beal, for the Office of Experiment Stations, and H. H. Goodell, for the Executive Committee of the Association. Pp. 192, pls. 3. (Bulletin No. 99, Office of Experiment Stations.) Price 15 cents.

Experiment Station Record, Vol. XII, No. 11. Pp. vii, 1001-1100. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per vol-

ume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

- Our Trade with Scandinavia, 1890–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 124. (Bulletin No. 22. Section of Foreign Markets.) Price 10 cents.
- Crop Reporter. Vol. 3, No. 3. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- List of the Publications of the Division of Agrostology. By F. Lamson-Scribner, Agrostologist. Pp. 8. (Circular No. 36, Division of Agrostology.)
- Monthly List of Publications. June, 1901. Pp. 4. (No. 416, Division of Publications.)
- A New Wheat Industry for the Semiarid West. By Mark Alfred Carleton, Cerealist. Pp. 8, figs, 2. (Circular No. 18, Division of Vegetable Physiology and Pathology.)

#### REPRINTS.

- The Principal Household Insects of the United States. By L. O. Howard and C. L. Marlatt. With a Chapter on Insects Affecting Dry Vegetable Foods, by F. H. Chittenden. Pp. 131, figs. 64. (Bulletin No. 4, new series, Division of Entomology.) Revised edition. Price 10 cents.
- Notes on the Mosquitoes of the United States: Giving Some Account of Their Structure and Biology, with Remarks on Remedies. By L. O. Howard, Ph. D., Entomologist. Pp. 70, figs. 22. (Bulletin No. 25, Division of Entomology.) Price 5 cents.
  - REPRINTS FROM YEARBOOK OF U. S. DEPARTMENT OF AGRICUL-TURE FOR 1900.
- Smyrna Fig Culture in the United States. By L. O. Howard, Ph. D., Entomologist. Pp. iii, 79–106, pls. 8, figs. 7.
- Commercial Plant Introduction. By Jared G. Smith, Chief of Section of Seed and Plant Introduction. Pp. ii, 131–144.
- Mountain Roads. By James W. Abbott, Special Agent in Office of Public Road Inquiries for Western Division. Pp. iii, 183–198, pls. 3.
- The Scale Insect and Mite Enemies of Citrus Trees. By C. L. Marlatt, First Assistant, Division of Entomology. Pp. iii, 247–290, pls. 6, figs. 25.
- How Birds Affect the Orchard. By F. E. L. Beal, B. S., Assistant Biologist, Biological Survey. Pp. ii, 291–304, figs. 5.
- Some Poisonous Plants of the Northern Stock Ranges. By V. K. Chesnut, In Charge of Poisonous Plant Investigations, Division of Botany. Pp. iii, 305–324, pls. 3, figs. 4.

- The Value of Potatoes as Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. iii, 337–348, figs. 3.
- The Food of Nestling Birds. By Sylvester D. Judd, Ph. D., Assistant Biologist, Biological Survey. Pp. iii, 411-436, pls. 5, figs. 9.
- Development of the Trucking Interests. By F. S. Earle, Horticulturist and Mycologist of the Alabama Experiment Station. Pp. iii, 437–452.
- Practical Irrigation. By C. T. Johnson, C. E., and J. D. Stannard, Assistants in Irrigation Investigations, Office of Experiment Stations. Pp. ii, 491–512, figs. 9.
- Successful Wheat Growing in Semiarid Districts. By Mark Alfred Carleton, Cerealist, Division of Vegetable Physiology and Pathology. Pp. ii, 529–542, pls. 4.
- Testing Commercial Varieties of Vegetables. By W. W. Tracy, jr., Assistant, Division of Botany. Pp. iii, 543-550.
- Dairy Products at the Paris Exposition of 1900. By Henry E. Alvord, Chief of the Dairy Division, Bureau of Animal Industry. Pp. ii, 599-627, pls. 5.
- William Saunders. By the Editor. Pp. 625-630, pl. 1.
- Statistical Matter Relating to Principal Crops and Farm Animals, Transportation Rates, etc., in the United States—1900. Pp. 753–861, pls. 8, figs. 7.

## FARMERS' BULLETINS.

### REPRINT.

- Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)
- Sheep Feeding. By John A. Craig, Professor of Animal Husbandry in the University of Winconsin. [Under the supervision of the Office of Experiment Stations.] Pp. 24. (Farmers' Bulletin No. 49.)
- Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)
- Bee Keeping. By Frank Benton, M. S., Assistant Entomologist. Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)
- Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)
- Hog Raising in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40. (Farmers' Bulletin No. 100.)
- Experiment Station Work—XI. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 103.)

Experiment Station Work—XIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 3. (Farmers' Bulletin No. 107.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review, April, 1901. Vol. XXIX, No. 4. Pp. 145-199, charts 9. (W. B., No. 245.)

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 16, 17, 18, 19, and 20 for the month of July, 1901.)

Daily Weather Map showing weather conditions throughout the United States and giving forecasts of probable changes.

Jos. A. ARNOLD, Acting Chief.

Approved:

JAMES WILSON, Secretary of Agriculture. This circular will be sent regularly to all who apply for it. No. 418.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., August 31, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[August, 1901.]

NOTE.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

#### NEW PUBLICATIONS.

- North American Fauna No. 20. Revision of the Skunks of the Genus Chincha. By Arthur H. Howell, Assistant, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 62, pls. 8. Price 10 cents.
- Exhibit of the Bureau of Chemistry at the Pan-American Exposition, Buffalo, N. Y., 1901. Prepared under the direction of Harvey W. Wiley, Chief of Bureau, by E. E. Ewell, W. D. Bigelow, and Logan Waller Page. Pp. 29, pls. 4. (Bulletin No. 63, Bureau of Chemistry.) Price 5 cents.
- The Life History of Two Species of Plant Lice Inhabiting Both the Witch Hazel and Birch. By Theo. Pergande, Assistant Entomologist. Pp. 44, figs. 23. (Bulletin No. 9, technical series, Division of Entomology.) Price 5 cents.
- Experiment Station Record, Vol. XIII, No. 1. Pp. viii, 1–100. Price 10 cents.
- Experiment Station Record, Vol. XIII, No. 2, Pp. ix, 101–200. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

- Sources of the Agricultural Imports of the United States, 1896–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 120. (Bulletin No. 24, Section of Foreign Markets.) Price 10 cents.
- Distribution of the Agricultural Exports of the United States, 1896–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 182. (Bulletin No. 25, Section of Foreign Markets.) Price 10 cents.

- A Forest Working Plan for Township 40, Totten and Crossfield Purchase, Hamilton County, N. Y., State Forest Preserve. By Ralph S. Hosmer, Field Assistant, and Eugene S. Bruce, Lumberman, Division of Forestry, U. S. Department of Agriculture. Preceded by a Discussion of Conservative Lumbering and the Water Supply, by Frederick H. Newell, Hydrographer, U. S. Geological Survey. Pp. 64, pls. 11, maps 4. (Bulletin No. 30, Division of Forestry.) Price 25 cents.
- Accessions to the Department Library, April–June, 1901. Pp. 24. (Library Bulletin No. 36.) Price 5 cents.
- Solution Studies of Salts Occurring in Alkali Soils. By Frank K. Cameron, Lyman J. Briggs, and Atherton Seidell. Pp. 89, figs. 10. (Bulletin No. 18, Division of Soils.) Price 5 cents.

Results of investigations carried on in the laboratories of the Division of Soils for the purpose of elucidating problems or difficulties encountered by the field parties in their work. It is essentially a technical paper.

- Crop Reporter. Vol. 3, No. 4. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- The Cultural Characters of Pseudomonas hyacinthi, Ps. campestris, Ps. phaseoli, and Ps. stewarti—Four One-Flagellate Yellow Bacteria Parasitic on Plants. By Erwin F. Smith, Pathologist in Charge of Laboratory of Plant Pathology. Pp. 153, figs. 2. (Bulletin No. 28, Division of Vegetable Physiology and Pathology.) Price 10 cents.
- Treatment for Roundworms in Sheep, Goats, and Cattle. By D. E. Salmon, D. V. M., Chief, Bureau of Animal Industry. Pp. 8. (Circular No. 35, Bureau of Animal Industry.)
- Monthly List of Publications. July, 1901. Pp. 4. (No. 417, Division of Publications.)

#### REPRINTS.

- Economic Grasses. By F. Lamson-Scribner, Agrostologist. Pp. 85, figs. 91. (Bulletin No. 14, Division of Agrostology.) Revised edition. Price 10 cents.
- Blackleg: Its Nature, Cause, and Prevention. By Victor A. Nörgaard, Chief of Pathological Division. Pp. 23, fig. 1. (Circular No. 31, revised.)
  - REPRINTS FROM YEARBOOK OF U. S. DEPARTMENT OF AGRICUL-TURE FOR 1900.
- Amplification of Weather Forecasts. By Alfred J. Henry, Professor of Meteorology, Weather Bureau. Pp. iii, 107–114, pls. 3, fig. 1.
- Forest Extension in the Middle West. By William L. Hall, Assistant Superintendent of Tree Planting, Division of Forestry. Pp. iii, 145–156, pls. 4.
- The World's Exhibit of Leaf Tobacco at the Paris Exposition of 1900. By Marcus L. Floyd, Tobacco Expert, Division of Soils. Pp. ii, 157–166, pls. 2.
- Influence of Rye on the Price of Wheat. By Edward T. Peters, of the Division of Statistics. Pp. iii, 167–182.

- Fungous Diseases of Forest Trees. By Hermann von Schrenk, Instructor in the Shaw School of Botany, and Special Agent in the Division of Vegetable Physiology and Pathology, Department of Agriculture. Pp. iii, 199–210, pls. 5.
- Hot Waves: Conditions which Produce Them, and their effect on Agriculture. By Alvin T. Burrows, Observer, Weather Bureau. Pp. iii, 325–336, pls. 3.
- The Selection of Materials for Macadam Roads. By Logan Waller Page, Expert in Charge of Road Material Laboratory, Division of Chemistry. Pp. iii, 349–356.
- Commercial Pear Culture. By M. B. Waite, Assistant Chief, Division of Vegetable Physiology and Pathology. Pp. iii, 369–396, pls. 3.
- Objects and Methods of Investigating Certain Physical Properties of Soils. By Lyman J. Briggs, Assistant Chief and Physicist, Division of Soils. Pp. ii, 397–410, pls. 2, figs. 2.
- The Date Palm and Its Culture. By Walter T. Swingle, Agricultural Explorer, Section of Seed and Plant Introduction. Pp. iii, 453-490, pls. 9, figs. 7.
- Free Delivery of Rural Mails. By Charles H. Greathouse, M. A., Editorial Clerk, Division of Publications. Pp. iii, 513–528, pls. 4, figs. 2.
- The Use and Abuse of Food Preservatives. By W. D. Bigelow, Assistant in Charge of Food Investigations, Division of Chemistry. Pp. ii, 551–568.
- The Influence of Refrigeration on the Fruit Industry. By William A. Taylor, Assistant Pomologist. Pp. iii, 561–580, pls. 5.
- Our Native Pasture Plants. By F. Lamson-Scribner, Agrostologist. Pp. ii, 581–598, pls. 4, figs. 11.

#### FARMERS' BULLETINS.

#### REPRINTS.

- Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)
- Peanuts: Culture and Uses. By R. B. Handy, of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 25.)
- Weeds, and How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 32, figs. 11. (Farmers' Bulletin No. 28.)
- Meats: Composition and Cooking. By Chas. D. Woods, Office of Experiment Stations. Pp. 39, figs. 4. (Farmers' Bulletin No. 34.)
- Potato Culture. By J. F. Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)
- Fowls: Care and Feeding. By G. C. Watson, M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)

- Sewage Disposal on the Farm, and the Protection of Drinking Water. By Theobald Smith, M. D., Professor in Harvard University, Pathologist to the Massachusetts State Board of Health, etc. Pp. 20, figs. 8. (Farmers' Bulletin No. 43.)
- How to Grow Mushrooms. By William Falconer, under the supervision of the Division of Vegetable Physiology and Pathology. Pp. 20, figs. 14. (Farmers' Bulletin No. 53.)
- Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S., Assistant Ornithologist, Biological Survey. Pp. 40, figs. 22. (Farmers' Bulletin No. 54.)
- The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief, Dairy Division, Bureau of Animal Industry. (Reprinted, with revision by the author, from the Yearbook of the U. S. Department of Agriculture for 1894.) Pp. 24. (Farmers' Bulletin No. 55.)
- Experiment Station Work—I. Prepared in the Office of Experiment Stations. Pp. 31, figs. 10. (Farmers' Bulletin No. 56.)
- Experiment Station Work—II. Pp. 32, figs. 7. (Farmers' Bulletin No. 65.)
- The Principal Insect Enemies of the Grape. By C. L. Marlatt, M. S. (Reprinted from original plates from the Yearbook of the U. S. Department of Agriculture for 1895.) Pp. 23, figs. 12. (Farmers' Bulletin No. 70.)
- Cattle Ranges of the Southwest: A History of the Exhaustion of the Pasturage and Suggestions for Its Restoration. By H. L. Bently, Special Agent in charge of Grass Station at Abilene, Tex. Pp. 32, figs. 9. (Farmers' Bulletin No. 72.)
- Experiment Station Work—II. Prepared in the Office of Experiment Stations. Pp. 32, figs. 3. (Farmers' Bulletin No. 73.)
- Raising Sheep for Mutton. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Stations. Pp. 48, figs. 18. (Farmers' Bulletin No. 96.)
- Suggestions to Southern Farmers. Prepared in the Division of Publications. Pp. 48. (Farmers' Bulletin No. 98.)
- Millets. By Thomas A. Williams, Assistant Agrostologist. Pp. 28, figs. 6. (Farmers' Bulletin No. 101.)
- Southern Forage Plants. Compiled from the publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)
- The Principal Insect Enemies of Growing Wheat. By C. L. Marlatt, First Assistant Entomologist. Pp. 40, figs. 25. (Farmers' Bulletin No. 132.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review, May, 1901. Vol. XXIX, No. 5. Pp. 201-241, pls. 4, charts 10. (W. B., No. 246.) Price 20 cents.

#### Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 21, 22, 23, and 24 for the month of August, 1901.)

Daily Weather Map, showing weather conditions throughout the United

States and giving forecasts of probable changes.

#### PUBLICATION NOT AVAILABLE.

(Reprinted from Bulletin No. 99, Office of Experiment Stations.)

- Proceedings of the Fourteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations:
- What is of Most Worth in Modern Education? By J. E. Stubbs, M. A., D. D., President of the School of Agriculture of the Nevada State University and Director of the Nevada Experiment Stations. Pp. 32-40.
- American Agricultural Experiment Stations. By W. H. Jordan, D. Sc., Director of the New York Agricultural Experiment Station, Geneva. Pp. 42-51.
- The Connecticut Experiment Station. By W. O. Atwater, Ph. D., Professor of Chemistry, Wesleyan University, and Director of the Storrs Agricultural Experiment Station. Pp. 51-54.
- The Legislative Career of Justin S. Morrill. By G. W. Atherton, LL. D., President of Pennsylvania College. Pp. 60-72.
- General Drift of Education at the Land-Grant Colleges. By J. K. Patterson, Ph. D., President of the Agricultural and Mechanical College of Kentucky.
- Methods of Experimenting with Cigar-Wrapper Leaf. By E. H. Jenkins, Ph. D., Director of the Connecticut Agricultural Experiment Station, New Haven. Pp. 102-105.
- Burley Tobacco: Its Growing and Curing. By M. A. Scovell, M. S., Director of the Kentucky Agricultural Experiment Station. Pp. 106-108.
- Available Energy of Food and Body Material. By W. O. Atwater, Ph. D., Professor of Chemistry, Wesleyan University, and Director of the Storrs Agricultural Experiment Station. Pp. 112-116.
- Cooperative Field Experiments. By E. B. Voorhees, D. Sc., Director of the New Jersey Agricultural Experiment Station and Professor of Agriculture, Rutgers College. Pp. 116-120.
- Cooperative Dairy-Herd Tests. By C. S. Phelps, B. S., Professor of Agriculture, Connecticut Agricultural College, and Vice-Director and Agriculturist of the Storrs Agricultural Experiment Station. Pp. 120-122.
- Our New Agricultural Industry. By I. P. Roberts, M. Agr., Director of the College of Agriculture and of the Agricultural Experiment Station, Cornell University. Pp. 124–126.
- Plant Physiology in Relation to Horticulture and Agriculture. By A. F. Woods, Chief, Division of Vegetable Physiology and Pathology, U. S. Department of Agriculture. Pp. 127-131.

- Laboratory Work in Horticulture. By E. S. Goff, Professor of Horticulture and Economic Entomology, University of Wisconsin, and Horticulturist of the Wisconsin Experiment Station. Pp. 132–134.
- The Educational Status of Horticulture. By F. W. Card, M. S., Professor of Horticulture, Rhode Island College of Agriculture and Mechanic Arts, and Horticulturist of the Rhode Island Experiment Station. Pp. 134–137.
- University Extension in Agriculture at Cornell University. By John Craig, B. S., M. S., in Charge of University Extension Teaching in Agriculture and Horticulture, Cornell University. Pp. 137–138.
- The function of the Station Botanist. By G. E. Stone, Ph. D., Professor of Botany, Massachusetts Agricultural College, and Botanist and Mycologist of the Massachusetts Experiment Station. Pp. 138–140.
- Progress of Variety Testing in Experiment Station Work. By F. W. Rane, B. Agr., M. S., Professor of Horticulture and Forestry, New Hampshire College of Agriculture and Mechanic Arts, and Horticulturist of the New Hampshire Experiment Station. Pp. 141–143.
- What Our Experiment Stations Have Done in Originating Varieties of Plants by Crossing, Selecting, etc. Abstract by B. D. Halsted, D. Sc., Botanist and Horticulturist, New Jersey Agricultural College Experiment Station, and Professor of Botany and Horticulture, Rutgers College. Pp. 143–144.
- Seed and Plant Introduction. By J. G. Smith, in Charge of Section of Seed and Plant Introduction, U. S. Department of Agriculture. Pp. 145–148.
- Grass and Forage-Plant Investigations in the United States Department of Agriculture and the State Experiment Stations. By T. A. Williams, Assistant Chief, Division of Agrostology, U. S. Department of Agriculture. Pp. 148-152.
- A Vegetation House Arranged for Pot Experiments, and Observations on the Banding of Trees to Prevent Injury by the Fall Cankerworm. By W. E. Britton, B. S., Horticulturist of the Connecticut Agricultural Experiment Station, New Haven. Pp. 152–153 and 160–161.
- Entomology in the Southern States. By H. Garman, Entomologist and Botanist of the Kentucky Agricultural Experiment Station. Pp. 153–160.
- Suggestions Toward Greater Uniformity in Nursery Inspection Laws and Rulings. By E. P. Felt, D. Sc., New York State Entomologist. Pp. 161–163.
- Experiences in Nursery and Orchard Inspection. By W. G. Johnson, M. A., Professor of Entomology, Maryland Agricultural College, and Entomologist of the Maryland Agricultural Experiment Station. Pp. 163–165.
- Nursery Inspection, and Notes on Crude Petroleum and Its Effects Upon Plants and Insects. By J. B. Smith, D. Sc., Professor of Entomology, Rutgers College, and Entomologist of the New Jersey Agricultural College Experiment Station. Pp. 165–166 and 176.

- Recent Results with Hydrocyanic-Acid Gas for the Destruction of Insects in Large Buildings. By W. G. Johnson, M. A., Professor of Entomology, Maryland Agricultural College, and Entomologist of the Maryland Agricultural Experiment Station. Pp. 166–170.
- The Danger to American Horticulture from the Introduction of Injurious Scale Insects. By G. B. King. Pp. 171–172.
- Nursery Inspection and Orchard Insecticide Work in Illinois. By S. A. Forbes, Ph. D., Professor of Zoology, College of Agriculture of the University of Illinois, and Entomologist of the Illinois Agricultural Experiment Station. Pp. 172–176.
- A Little-Known Asparagus Pest, and A Power Sprayer for Asparagus. By F. A. Sirrine, M. S., Entomologist of the New York Agricultural Experiment Station, Geneva. Pp. 177-178.
- Economic Entomology in Florida. By H. A. Gossard, M. S., Professor of Zoology and Entomology, Florida Agricultural College, and Entomologist of the Florida Agricultural Experiment Station. Pp. 178–182.
- Some Observations Upon Artace punctistriga. By H. A. Morgan, B. S. A., Professor of Zoology and Entomology, Louisiana State University and Agricultural and Mechanical College, and Entomologist of the Louisiana State Experiment Station. Pp. 182–183, pls. 3.
- The Relation of the Agricultural and Mechanical College to the State. By W. E. Drake B. S., Professor of Mechanical Engineering, Rhode Island College of Agriculture and Mechanic Arts. Pp. 183–184.
- The Student of Mechanic Arts, An Apprentice. By J. D. Hoffman, M. E., Instructor in Wood Work, Perdue University. Pp. 186–189.

GEO. WM. HILL,

Editor and Chief

Approved:

J. H. Brigham,

Acting Secretary of Agriculture.

#### NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and

the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and

other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Year-book usually issued, the Department is allotted only 30,000, while the remaining 470,000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents,

and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for dis-

tribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the Superintendent of Documents, Union Building, Washington, D. C., and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than one copy of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be

directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., September 30, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[September, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Staticus. Application for them should be made to the several stations in the different States.

#### NEW PUBLICATIONS.

Field Work of the Division of Agrostology: A Review and Summary of the Work Done since the Organization of the Division, July 1, 1895. By Cornelius L. Shear, Assistant Agrostologist. Prepared under the direction of F. Lamson-Scribner, Agrostologist. Pp. 67, maps 8, pls. 28. (Bulletin No. 25, Division of Agrostology.) Price 15 cents.

Digest of Game Laws for 1901. By T. S. Palmer and H. W. Olds, Assistants, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 157, pls. 8. (Bulletin No. 16, Division of Biological Survey.) Price 10 cents.

Presents in convenient form the provisions of the Game Laws now in force, including the amendments enacted during the present year.

North American Fauna No. 21. Natural History of the Queen Charlotte Islands, British Columbia, and Natural History of the Cook Inlet Region, Alaska. By Wilfred H. Osgood, Assistant, Biological Survey. Prepared under the direction of Dr. C. Hart Merriam, Chief of Division of Biological Survey. Pp. 87, pls. 7, fig. 1. Price 10 cents.

Contributions from the U. S. National Herbarium. Vol. VII, No. 2. The Origin and Distribution of the Cocoa Palm. By O. F. Cook. Pp. v, 257–293. Price 5 cents.

The Fall Army Worm and Variegated Cutworm. Prepared under the direction of the Entomologist, by F. H. Chittenden, Assistant Entomologist. Pp. 64, figs. 11. (Bulletin No. 29, new series, Division of Entomology.) Price 5 cents.

Description, distribution, history, food plants, diseases, and other information of interest relating to these widely distributed crop pests.

Wheat Growing and General Agricultural Conditions in the Pacific Coast Region of the United States. By Edwin S. Holmes, jr., Division of Statistics. Pp. 44, maps 4, pls. 8. (Bulletin No. 20, miscellaneous series, Division of Statistics.) Price 10 cents.

A report on the farming system of the Pacific coast region with description of farms and farm machinery, temperature and rainfall, population, area devoted to wheat, varieties of wheat raised, acreage, production, value, and methods of disposal of the crop.

- Rates of Charge for Transporting Garden Truck, with Notes on the Growth of the Industry. By Edward G. Ward, jr., Expert in Transportation Statistics; and Edwin S. Holmes, jr., Special Agent. Pp. 86. (Bulletin No. 21, miscellaneous series, Division of Statistics.) Price 5 cents.
- Wages of Farm Labor in the United States. Results of Eleven Statistical Investigations, 1866–1899. Prepared under the direction of the Statistician. Pp. 47. (Bulletin No. 22, Miscellaneous Series, Division of Statistics.) Price 5 cents.
- Crop Reporter. Vol. 3, No. 5. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- Plant Breeding. By Willet M. Hays, Professor of Agriculture, University of Minnesota. Pp. 72, pls. 6, figs. 21. (Bulletin No. 29, Division of Vegetable Physiology and Pathology.) Price 10 cents. Results of investigations of plant-breeding problems and of work done in the improvement of cotton, corn, wheat, oranges, pears, grapes, etc.
- Monthly List of Publications. August, 1901. Pp. 4. (No. 418, Division of Publications.)
- Reclamation of Salt Marsh Lands. By Thos. H. Means, Assistant. Pp. 10. (Circular No. 8, Bureau of Soils.)

Report of the results of an investigation of the character of the soils of tide marshes and the possibilities of reclaiming them for agricultural purposes.

#### REPRINTS.

- A Report on the Work and Expenditures of the Agricultural Experiment Stations for the Year ended June 30, 1900. By A. C. True, Director of the Experiment Stations. Pp. 181, pls. 8: (Bulletin No. 93, Office of Experiment Stations.) Price 15 cents.
- Fourth Report on the Agricultural Investigations in Alaska, 1900. By C. C. Georgeson, M. S., Special Agent in Charge of Alaska Investigations. Pp. 83, pls. 24. (Bulletin No. 94, Office of Experiment Stations.) Price 20 cents.
- Experiment Station Record, Vol. XII, No. 1. Pp. vi, 1–100. Price 10 cents.
- Our Trade with Scandinavia, 1890–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 124. (Bulletin No. 22, Section of Foreign Markets.) Price 10 cents.
- The Forest Nursery: Collection of Tree Seeds and Propagation of Seedlings. By George B. Sudworth, Dendrologist, Division of Forestry. Pp. 63, pls. 5, figs. 11. (Bulletin No. 29, Division of Forestry.) Price 10 cents.
- Catalogue of the First Four Thousand Samples in the Soil Collection of the Division of Soils. By Milton Whitney, Chief of Division of Soils. Pp. 145. (Bulletin No. 16, Division of Soils.) Price 10 cents.
- The True Clothes Moths (*Tinea pellionella et al.*). By C. L. Marlatt, First Assistant Entomologist. Pp. 8, figs. 3. (Circular No. 36, second series, Division of Entomology.)

- REPRINTS FROM YEARBOOK OF U. S. DEPARTMENT OF AGRICUL-TURE FOR 1900.
- Practical Forestry in the Southern Appalachians. By Overton W. Price, Superintendent of Working Plans, Division of Forestry. Pp. iii, 357–368, pls. 6.
- Rise and Future of Irrigation in the United States. By Elwood Mead, Expert in Charge of Irrigation Investigations, Office of Experiment Stations. Pp. iii, 591–612, pls. 5.
- Statistical Matter Relating to Principal Crops and Farm Animals, Transportation Rates, etc., in the United States, 1900. Pp. 753–865.

### FARMERS' BULLETINS.

Experiment Station Work—XVIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 14. (Farmers' Bulletin No. 133.)

CONTENTS: Value of stable manure—Alfalfa as a fertilizer—Liming acid soils—Celery culture—The greenhouse in summer—Frost-resisting strawberries—Fumigator for fruit trees—Foundation in comb building—Ridding houses of flies—Slop for pigs—Profitable crops for pigs—Barley for horses—Water in butter—Losses in the silo.

Tree Planting on Rural School Grounds. By William L. Hall, Assistant Superintendent of Tree Planting, Bureau of Forestry. Pp. 38, figs. 17. (Farmers' Bulletin No. 134.)

Deals with the present condition and needs of rural school grounds and indicates methods for their improvement. It also suggests important lines of study for the teacher and school in connection with trees and forests.

Sorghum Sirup Manufacture. By A. A. Denton, Medicine Lodge, Kans. Pp. 40, figs. 26. (Farmers' Bulletin No. 135.)

Discusses the entire subject of the manufacture of sorghum sirup from the planting of the sorghum seed and cultivation of the plant through the various processes to the finished product. It takes the place of Farmers' Bulletin No. 90, issued in 1899, considerable new and valuable information having since been received.

The Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 48, figs. 7. (Farmers' Bulletin No. 137.)

Description of the Angora goat; its uses, care, management, shearing, diseases, mohair, etc.

#### REPRINTS.

- Alfalfa, or Lucern. By Jared G. Smith, Assistant Agrostologist. Pp. 24, figs. 3. (Farmers' Bulletin No. 31.)
- Silos and Silage. By Charles S. Plumb, B. S., Professor of Animal Industry and Dairying in Purdue University, and Director of the Indiana Agricultural Experiment Station. Pp. 32, figs. 10. (Farmers' Bulletin No. 32.)
- Corn Culture in the South. By S. M. Tracy, M. S. Pp. 24. (Farmers' Bulletin No. 81.)
- Experiment Station Work—VIII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 6. (Farmers' Bulletin No. 87.)

Experiment Station Work—IX. Prepared in the Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 92.)

Experiment Station Work—X. Prepared in the Office of Experiment Stations. Pp. 32, figs. 5. (Farmers' Bulletin No. 97.)

Protection of Food Products from Injurious Temperatures. By H. E. Williams, Chief Clerk, Weather Bureau. Pp. 26. (Farmers' Bulletin No. 125.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review, June, 1901. Vol. XXIX, No. 6. Pp. 243-289, pls. 4, charts 9. (W. B., No. 247.) Price 20 cents.

Weather Bureau Exhibit, Pan-American Exposition. By D. T. Maring, Weather Bureau. Prepared under direction of Willis L. Moore, Chief, U. S. Weather Bureau. Pp. 4, frontispiece, pls. 3. (W. B. No. 248.)

Special Report on the Hurricane of August 13-16, 1901, on the Louisiana and Mississippi Coasts. By Isaac M. Cline, Forecast Official in Charge of the West Gulf District at New Orleans, La. Pp. 6.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with special reference to their effect on crops. (Nos. 25, 26, 27, 28, and 29 for the month of September, 1901.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

GEO. WM. HILL, Editor and Chief.

Approved:

JAMES WILSON, Secretary of Agriculture. This circular will be sent regularly to all who apply for it. No. 425.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., October 31, 1901.

# MONTHLY LIST OF PUBLICATIONS.

[October, 1901.]

Note.—To obtain those publications to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

#### NEW PUBLICATIONS.

Exhaustion and Abandonment of Soils. Testimony of Milton Whitney, Chief of Division of Soils, Before the Industrial Commission. Pp. 48. Report No. 70. Price 5 cents.

American Breeds of Fowls. II. The Wyandotte. By T. F. McGrew. Pp. 30, pls. 10 (colored), figs. 3. (Bulletin No. 31, Bureau of Animal Industry.) Price 15 cents.

History of the Wyandotte, descriptions of the different varieties, and how to mate them.

The Tuberculin Test of Imported Cattle. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 22. (Bulletin No. 32, Bureau of Animal Industry.) Price 5 cents.

Gives reasons for requiring that the tuberculin test shall be applied to all cattle over six months old imported into the United States, and the importance of this measure as a means for protecting the interests of the farmers of this country.

The Relation of Sparrows to Agriculture. By Sylvester D. Judd, Ph. D., Assistant, Biological Survey. Prepared under the direction of C. Hart Merriam, Chief of Biological Survey. Pp. 98, pls. 4, figs. 19. (Bulletin No. 15, Division of Biological Survey.) Price 10 cents.

Results of an investigation of the food habits of native sparrows, based on extended field observations and an examination of 4,273 stomachs of sparrows showing the value of these birds as weed destroyers.

Seeds of Commercial Saltbushes. By G. N. Collins. Pp. 28, pls. 8. (Bulletin No. 27, Division of Botany.) Price 15 cents.

Descriptions and illustrations of authentic specimens of fruits and seeds of commercial saltbushes.

The Chayote: A Tropical Vegetable. By O. F. Cook, Special Agent for Tropical Agriculture. Pp. 31, pls. 8. (Bulletin No. 28, Division of Botany.) Price 10 cents.

- Insect Enemies of the Spruce in the Northeast. A popular account of results of special investigations, with recommendations for preventing losses. Prepared under the direction of the Entomologist, by A. D. Hopkins, Ph. D., Vice-Director and Entomologist of the West Virginia Agricultural Experiment Station. Pp. 80, pls. 16, figs. 2. (Bulletin No. 28, new series, Division of Entomology.) Price 10 cents.
- Some Miscellaneous Results of the Work of the Division of Entomology. V. Prepared under the direction of L. O. Howard, Entomologist. Pp. 98, pls. 2, figs. 29. (Bulletin No. 30, new series, Division of Entomology.) Price 5 cents.
- Experiment Station Record, Vol. XII, No. 12. Pp. XVI, 1101–1189. Price 10 cents.

The Record contains numerous abstracts of the publications of the agricultural experiment stations and kindred institutions in this and other countries; articles and editorials on topics of special interest in agricultural science by American and foreign experts; and notes on the experiment stations.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per vol-

ume (12 numbers) beginning with Vol. VIII, at \$1, payable in advance.

- The Relation of Lime and Magnesia to Plant Growth. I. Liming of Soils from a Physiological Standpoint. By Oscar Loew, Expert in Physiological Chemistry. II. Experimental Study of the Relation of Lime and Magnesia to Plant Growth. By D. W. May, of the Office of Experiment Stations. Pp. 53, pls. 3. (Bulletin No. 1, Bureau of Plant Industry, Vegetable Pathological and Physiological Investigations.) Price 10 cents.
- Prunes and Prune Culture in Western Europe, with Special Reference to Existing Conditions in the Pacific Northwest. By Edward R. Lake, Professor of Botany and Horticulture, Oregon State Agricultural College. Pp. 23, pls. 10. (Bulletin No. 10, Division of Pomology.) Price 10 cents.

Contains the report of a careful investigation of the economics of the prune industry in western Europe, more especially in France and Germany.

- Crop Reporter. Vol. 3, No. 6. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. A three-column quarto publication devoted to agricultural topics.
- Laws for the Protection of Birds and Game in the District of Columbia. By T. S. Palmer, Assistant Chief, Biological Survey. Pp. 8. (Circular No. 34, Division of Biological Survey.)
- Monthly List of Publications. September, 1901. Pp. 4. (No. 422, Division of Publications.)
- Publications of the U. S. Department of Agriculture, for sale by the Superintendent of Documents, Union Building, Washington, D. C. Corrected to August 1, 1901. Pp. 40. (No. 179, Division of Publications.) 8th edition.

#### REPRINTS.

American Breeds of Fowls. I. The Plymouth Rock. By T. F. McGrew. Pp. 32, pls. 6 (colored), figs. 10. (Bulletin No. 29, Bureau of Animal Industry.) Price 15 cents.

- Food of the Bobolink, Blackbirds, and Grackles. By F. E. L. Beal, B. S., Assistant Biologist. Prepared under the direction of Dr. C. Hart Merriam, Chief of Biological Survey. Pp. 77, pl. 1, figs. 6. (Bulletin No. 13, Division of Biological Survey.)
- American Ginseng: Its Commercial History, Protection, and Cultivation. By George V. Nash. Revised and Extended by Maurice G. Kains Pp. 32, figs. 5. (Bulletin No. 16, Division of Botany.) Revised edition. Price 5 cents.
- Composition of Maize (Indian corn), including the Grain, Meal, Stalks, Pith, Fodder, and Cobs. Compiled chiefly from the Records of the Division of Chemistry, by H. W. Wiley, Chemist of the Department of Agriculture. Pp. 31. (Bulletin No. 50, Division of Chemistry.) Price 5 cents.
- Some Insects Injurious to the Violet, Rose, and Other Ornamental Plants. A Collection of Articles Dealing with Insects of this Class. Prepared under the direction of the Entomologist. By F. H. Chittenden, Assistant Entomologist. Pp. 114, pls. 4, figs. 29. (Bulletin No. 27, new series, Division of Entomology.) Revised edition. Price 10 cents.
- Report on the Agricultural Resources and Capabilities of Hawaii. By Wm. C. Stubbs, Ph. D., Director, Louisiana Experiment Stations. Pp. 100, frontispiece, pls. 27. (Bulletin No. 95, Office of Experiment Stations.) Price 20 cents.
- Proceedings of the Fourteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations, Held at New Haven and Middletown, Conn., November 13–15, 1900. Edited by A. C. True and W. H. Beal, for the Office of Experiment Stations, and H. H. Goodell, for the Executive Committee of the Association. Pp. 192, pls. 3. (Bulletin No. 99, Office of Experiment Stations.) Price 15 cents.
- Trade of the Philippine Islands. By Frank H. Hitchcock, Chief of Section of Foreign Markets. Pp. 160, map 1. (Bulletin No. 14, Section of Foreign Markets.) Price 10 cents.
- Practical Forestry in the Adirondacks. By Henry S. Graves, Superintendent of Working Plans. Pp. 85, pls. 20. (Bulletin No. 26, Division of Forestry.) Price 15 cents.
- Directions for the Use of Blackleg Vaccine. By Victor A. Nörgaard, Chief of Pathological Division, Bureau of Animal Industry. Pp. 8, figs. 3. (Circular No. 23, Bureau of Animal Industry.) Second revision.
- The Free Distribution of Blackleg Vaccine. By Victor A. Nörgaard, V. S. (Copenhagen), Chief of Pathological Division, Bureau of Animal Industry. Pp. iii, 35–51, figs. 4. (From the Seventeenth Annual Report of the Bureau of Animal Industry, 1900.)

#### FARMERS' BULLETINS.

Irrigation in Field and Garden. By E. J. Wickson, M. A., Professor of Agricultural Practice, University of California, and Horticulturist of the California Agricultural Experiment Station. Pp. 40, figs. 18. (Farmers' Bulletin No. 138.)

Instructions in irrigation in field and garden for the individual farmer.

Emmer: A Grain for the Semiarid Regions. By Mark Alfred Carleton, Cerealist, Vegetable Pathological and Physiological Investigations, Bureau of Plant Industry. Pp. 16, figs. 3. (Farmers' Bulletin No. 139.)

Report on the characteristics, history, distribution, adaptation for cultivation in this country, tests, uses, and varieties of this cold and drought-resistant grain.

Pineapple Growing. By Peter H. Rolfs, Pathologist, in Charge of Tropical Laboratory, Vegetable Pathological and Physiological Investigations, Bureau of Plant Industry. Pp. 48, figs. 4. (Farmers' Bulletin No. 140.)

A concise statement of the general operations connected with the production of pineapples in the field and on a large scale.

Poultry Raising on the Farm. By D. E. Salmon, D. V. M., Chief of Bureau of Animal Industry. Pp. 16, figs. 31. (Farmers' Bulletin No. 141.)

Suggestions for the construction of poultry houses and the care of fowls.

#### REPRINTS.

- Leguminous Plants for Green Manuring and for Feeding. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 16.)
- Peanuts: Culture and Uses. By R. B. Handy, of the Office of Experiment Stations. Pp. 24, fig. 1. (Farmers' Bulletin No. 25.)
- Weeds; and How to Kill Them. By Lyster H. Dewey, Assistant Botanist. Pp. 32, figs. 11. (Farmers' Bulletin No. 28.)
- Souring of Milk and Other Changes in Milk Products. Prepared in the Office of Experiment Stations. Pp. 23. (Farmers' Bulletin No. 29.)
- Silos and Silage. By Charles S. Plumb, B. S., Professor of Animal Industry and Dairying in Purdue University and Director of the Indiana Agricultural Experiment Station. Pp. 32, figs. 10. (Farmers' Bulletin No. 32.)
- Potato Culture. By J. F, Duggar, of the Office of Experiment Stations. Pp. 24, figs. 2. (Farmers' Bulletin No. 35.)
- Cotton Seed and its Products. Prepared in the Office of Experiment Stations. Pp. 16. (Farmers' Bulletin No. 36.)
- Kafir Corn: Characteristics, Culture, and Uses. By C. C. Georgeson, Professor of Agriculture in Kansas State Agricultural College. Pp. 12, fig. 1. (Farmers' Bulletin No. 37.)
- Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)
- Onion Culture. By R. L. Watts, B. Agr., Instructor in Horticulture at the University of Tennessee and Horticulturist of the Tennessee Agricultural Experiment Station. Pp. 31, figs. 3. (Farmers' Bulletin No. 39.)

- Fowls: Care and Feeding. By G. C. Watson, B. Agr., M. S., Professor of Agriculture in Pennsylvania State College and Agriculturist of the Pennsylvania Agricultural Experiment Station. Pp. 24, figs. 4. (Farmers' Bulletin No. 41.)
- Some Insects Injurious to Stored Grain. By F. H. Chittenden, Assistant Entomologist. Pp. 24, figs. 18. (Farmers' Bulletin No. 45.) Revised edition.
- Irrigation in Humid Climates. By F. H. King, Professor of Agricultural Physics, College of Agriculture, University of Wisconsin, and Physicist of the Wisconsin Agricultural Experiment Station. Under the supervision of the Office of Experiment Stations. Pp. 27, figs. 4. (Farmers' Bulletin No. 46.)
- Insects Affecting the Cotton Plant. By L. O. Howard, Ph. D., Entomologist. [Reprinted with revision by the Author, from Bulletin No. 33, Office of Experiment Stations.] Pp. 32, figs. 18, (Farmers' Bulletin No. 47.)
- Sheep Feeding. By John A. Craig, Professor of Animal Husbandry in the University of Wisconsin. Under the supervision of the Office of Experiment Stations. Pp. 24. (Farmers' Bulletin No. 49.)
- Sorghum as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist. Pp. 20, fig. 1. (Farmers' Bulletin No. 50.)
- Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers' Bulletin No. 51.)
- Marketing Farm Produce. By George G. Hill, formerly manager and editor of the American Farmer, Illinois. Pp. 28, figs. 7 (Farmers' Bulletin No. 62.)
- Milk as Food. Prepared in the Office of Experiment Stations. Pp. 39, charts 2. (Farmers' Bulletin No. 74.)
- Tomato Growing. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture, Rutgers College, New Brunswick, N. J. Pp. 30. (Farmers' Bulletin No. 76.)
- The Liming of Soils. By H. J. Wheeler, Ph. D., Chemist of the Rhode Island Agricultural Experiment Station. Pp. 20. (Farmers' Bulletin No. 77.)
- Experiment Station Work—V. Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 78.)
- Tobacco Soils. By Milton Whitney, Chief of Soils. Pp. 23, pl. 1. (Farmers' Bulletin No. 83.)
- Fish as Food. By C. F. Langworthy, Ph. D., Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 85.)

- Experiment Station Work—VIII. Prepared in the Office of Experiment Stations. Pp. 32, figs. 6. (Farmers' Bulletin No. 87.)
- Experiment Station Work—IX. Prepared in the Office of Experiment Stations. Pp. 30. (Farmers' Bulletin No. 92.)
- Sugar as Food. By Mary Hinman Abel. Prepared under the Supervision of the Office of Experiment Stations. Pp. 27. (Farmers' Bulletin No. 93.)
- Experiment Station Work—X. Prepared in the Office of Experiment Stations. Pp. 32, figs. 5. (Farmers' Bulletin No. 97.)
- Suggestions to Southern Farmers. Prepared in the Division of Publications. Pp. 48. (Farmers' Bulletin No. 98.)
- Hog Raising in the South. By S. M. Tracy, M. S., formerly Director of the Mississippi Agricultural Experiment Station. Pp. 40. (Farmers' Bulletin No. 100.)
- Experiment Station Work—XI. Prepared in the Office of Experiment Stations, A. C. True, Director. Pp. 32, figs. 5. (Farmers' Bulletin No. 103.)
- Saltbushes. By P. Beveridge Kennedy, Ph. D., Assistant in the Division of Agrostology. Prepared under the direction of the Agrostologist. Pp. 20, figs. 9. (Farmers' Bulletin No. 108.)
- Red Clover Seed: Information for Purchasers. By A. J. Pieters, Assistant Botanist, Division of Botany, in charge of Pure Seed Investigations. Pp. 11, figs. 2. (Farmers' Bulletin No. 123.)
- Practical Suggestions for Farm Building. By George G. Hill. Pp. 48, figs. 28. (Farmers' Bulletin No. 126.)
- Sweet Potatoes. By D. M. Nesbit. Pp. 40. (Farmers' Bulletin No. 129.)
- The Principal Insect Enemies of Growing Wheat. By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 40, figs. 25. (Farmers' Bulletin No. 132.)
- Sorghum Sirup Manufacture. By A. A. Denton, Medicine Lodge, Kans. Pp. 40, figs. 26. (Farmers' Bulletin No. 135.)
- The Angora Goat. By George Fayette Thompson, Editorial Clerk, Bureau of Animal Industry. Pp. 48, figs. 7. (Farmers' Bulletin No. 137.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Monthly Weather Review, July, 1901. Vol. XXIX, No. 7. Pp. 291–339, pls. 1, charts 9. (W. B., No. 249.) Price 20 cents.

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

[Reprints from the Seventeenth Annual Report of the Bureau of Animal Industry, 1900.]

Meats and Meat Products at the Paris Exposition of 1900. By Henry E. Alvord, C. E., Chief of the Dairy Division, Bureau of Animal Industry, in Charge of the United States Animal Industry Exhibit at Paris. Pp. 223–234.

The Thirteenth International Medical Congress. By E. A. de Schweinitz, Ph. D., M. D., Chief of Biochemic Division, Bureau of Animal Industry. The Tenth International Congress of Hygiene and Demography. By E. A. de Schweinitz Ph. D., M. D., Chief of Biochemic Division, Bureau of Animal Industry. Pp. 254–261.

The Bacillus of Tuberculosis. By E. A. de Schweinitz, Ph. D., M. D., Chief of Biochemic Division, Bureau of Animal Industry. Pp. iii. 262–280.

GEO. WM. HILL,

Editor and Chief.

Approved:

JAMES WILSON,

Secretary of Agriculture.

#### NOTES REGARDING DEPARTMENT PUBLICATIONS.

The publications of the U. S. Department of Agriculture are mainly of three general classes:

I. Publications issued annually, comprising the Yearbooks, the Annual Reports of the Department, the Annual Reports of the Bureau of Animal Industry, and

the Annual Reports of the Weather Bureau.

II. Other Departmental reports, divisional bulletins, etc. Of these, each bureau, division, and office has its separate series in which the publications are numbered consecutively as issued. They comprise reports and discussions of a scientific or technical character.

III. Farmers' bulletins, divisional circulars, reprinted Yearbook articles, and

other popular papers.

The publications in Class I are distributed by the Department and by Senators and Representatives in Congress. For instance, of the 500,000 copies of the Year-book usually issued, the Department is allotted only 30,000, while the remaining 470 000 copies are distributed by Members of Congress. The Department's supply of the publications of this class is, therefore, limited, and consequently has to be reserved almost exclusively for distribution to its own special correspondents,

and in return for services rendered.

The publications of Class II are not for distribution by Members of Congress, and they are not issued in editions large enough to warrant free general distribution by the Department. The supply is used mainly for distribution to those who cooperate with the Department or render it some service, and to educational and other public institutions. A sample copy of this class of publications can usually be sent on application, but, aside from this, the Department generally finds it necessary to refer applicants to the Superintendent of Documents, of whom further mention is made below.

The publications of Class III treat in a practical way of subjects of particular interest to farmers. They are usually issued in large editions, and are for free general distribution by the Department. The farmers' bulletins are also for distribution by Senators and Representatives in Congress, to each of whom is furnished annually, according to law, a quota of several thousand copies for dis-

tribution among his constituents.

A limited supply of nearly all the publications in Classes I and II is, in compliance with the law, placed in the hands of the Superintendent of Documents for sale at cost of printing. Application for these should be addressed to the Superintendent of Documents, Union Building, Washington, D. C., and should be accompanied by postal money order, payable to him for the amount of the price. No postage stamps or private checks should be sent. The Superintendent of Documents is not permitted to sell more than one copy of any public document to the same person. The Public Printer may sell to one person any number not to exceed 250 copies if ordered before the publication goes to press.

The Secretary of Agriculture has no voice in designating the public libraries which shall be depositories of public documents. Of the distribution of documents to such depositories, including the publications of this and all other Departments of the Government, the Superintendent of Documents has full charge.

For publications of the Weather Bureau, requests and remittances should be

directed to the Chief of the Weather Bureau.

The Department has no list of persons to whom all publications are sent. The monthly list, issued on the first day of each month, will be mailed regularly to all who apply for it. The Department also issues and sends out to all who apply for them a complete list of all publications of which the Department has a supply for free distribution, and a similar list of all the Department's publications for sale by the Superintendent of Documents.

This circular will be sent regularly to all who apply for it.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., November 30, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[November, 1901.]

Note.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remittances must be directed.

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to

the several stations in the different States.

#### NEW PUBLICATIONS.

Report of the Secretary of Agriculture. 1901. Pp. 113.

Relation of Bovine Tuberculosis to the Public Health. Salmon, D. V. M., Chief of Bureau of Animal Industry. [Read as Chairman of the Committee on Animal Diseases and Animal Food of the American Public Health Association at Buffalo, N. Y., September 16, 1901.] Pp. 36. (Bulletin No. 33, Bureau of Animal Industry.) Price 5 cents.

Contributions from the U.S. National Herbarium. Vol. V, No. 6. Report on a Botanical Survey of the Dismal Swamp Region. By Thomas H. Kearney. Pp. x, 321–585, x, pls. 13, figs. 40, maps 2.

Price 50 cents.

The Seed Coats of Certain Species of the Genus Brassica. By A. J. Pieters and Vera K. Charles. Pp. 19, figs. 6. (Bulletin No. 29.

Division of Botany.) Price 5 cents.

Studies on Bread and Bread Making at the University of Minnesota in 1899 and 1900. By Harry Snyder, B. S., Professor of Chemistry, College of Agriculture, University of Minnesota, and Chemist, Agricultural Experiment Station. Pp. 65, pls. 3, fig. 1. (Bulletin No. 101, Office of Experiment Stations.) Price 10 cents.

Experiments on Losses in Cooking Meat. 1898-1900. By H. S. Grindley, D. Sc., Associate Professor of Chemistry, College of Science, University of Illinois, with the cooperation of H. McCormack, M. S., and H. C. Porter, M. S. Pp. 64. (Bulletin No. 102, Office of Experiment Stations.) Price 5 cents.

Notes on the Red Cedar. By Charles Mohr, Ph. D., Agent in the Division of Forestry. Pp. 37, pls. 3, figs. 13. (Bulletin No. 31,

Division of Forestry.) Price 10 cents.

Accessions to the Department Library, July-September, 1901. Pp. 35. (Library Bulletin No. 38). Price 5 cents.

Crop Reporter. Vol. 3, No. 7. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. Official Method for Analysis of Tanning Materials. [Adopted at the Eighteenth Convention of the Association of Official Chemists. By H. W. Wiley, Chief of Bureau and Secretary A. O. A. C.

Pp. 2. (Circular No. 8. Bureau of Chemistry.) Monthly List of Publications. October, 1901. Pp. 8. (No. 425,

Division of Publications.)

#### REPRINTS.

By Frank H. Hitchcock, Chief, Section of Trade of Denmark. Foreign Markets. Pp. 88, frontispiece. (Bulletin No. 9, Section of Foreign Markets.) Price 5 cents.

Our Foreign Trade in Agricultural Products, 1890-1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 62.

letin No. 19, Section of Foreign Markets.) Price 5 cents.

Agricultural Exports of the United States, by Countries, 1895–1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. 88. (Bulletin No. 20, Section of Foreign Markets.) Price 10 cents.

Agricultural Imports of the United States, by Countries, 1895–1899. By Frank H. Hitchcock, Chief, Section of Foreign Markets. 74. (Bulletin No. 21, Section of Foreign Markets.) Price 5 cents.

Our Foreign Trade in Agricultural Products, 1891–1900. By Frank H. Hitchcock, Chief, Section of Foreign Markets. Pp. 61. (Bul-

letin No. 23, Section of Foreign Markets.) Price 5 cents.

Treatment for Roundworms in Sheep, Goats, and Cattle. By Ch. Wardell Stiles, Ph. D., Zoologist, Bureau of Animal Industry. Pp. 8. (Circular No. 35, Bureau of Animal Industry.)

#### FARMERS' BULLETINS.

#### REPRINTS.

Barnyard Manure. By W. H. Beal, of the Office of Experiment

Stations. Pp. 32, figs. 7. (Farmers' Bulletin No. 21.)

The Feeding of Farm Animals. By E. W. Allen, Ph. D., Assistant Director of the Office of Experiment Stations. Pp. 44. (Farmers' Bulletin No. 22.)

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers'

Bulletin No. 24.)

Flax for Seed and Fiber in the United States. By Chas. Richards Dodge, Special Agent for Fiber Investigations. Pp. 16. (Farmers' Bulletin No. 27.)

By Jared G. Smith, Assistant Agrostologist. Alfalfa, or Lucern.

Pp. 24, figs. 3. (Farmers' Bulletin No. 31.)

Meats: Composition and Cooking. By Chas. D. Woods, Office of

Experiment Stations. Pp. 29, figs. 4. (Farmers' Bulletin No. 34.) Farm Drainage. By C. G. Elliott, C. E., member of the American Society of Civil Engineers, Peoria, Illinois. Pp. 24, figs. 6. (Farmers' Bulletin No. 40.) Revised.

Sewage Disposal on the Farm, and the Protection of Drinking Water. By Theobald Smith, M. D., Professor in Harvard University, Pathologist to the Massachusetts State Board of Health, etc. Pp.

20, figs. 8. (Farmers' Bulletin No. 43.)

Commercial Fertilizers: Composition and Use. By Edward B. Voorhees, M. A., Director of the New Jersey Agricultural Experiment Stations and Professor of Agriculture in Rutgers College. Under the Supervision of the Office of Experiment Stations. Pp. (Farmers' Bulletin No. 44.)

The Manuring of Cotton. (Condensed from an article by H. C. White, Ph. D., in Bulletin No. 33 of the Office of Experiment

Stations.) Pp. 16. (Farmers' Bulletin No. 48.)

Sorghum as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agrostologist.

Pp. 20, fig. 1. (Farmers' Bulletin No. 50.) Revised.

Standard Varieties of Chickens. By George E. Howard, Secretary of National Poultry and Pigeon Association, under the supervision of Dr. D. E. Salmon, Chief of Bureau of Animal Industry. Pp. 48, figs. 42. (Farmers'Bulletin No. 51.) Revised.

The Sugar Beet: Culture, Seed Development, Manufacture, and Statistics. By H. W. Wiley, Chief of the Bureau of Chemistry, and formerly Director of the Department Sugar Beet Experiment Station in Nebraska. Pp. 48, figs. 24. (Farmers' Bulletin No.

52.) Second revised edition, September, 1901.

The Soy Bean as a Forage Crop. By Thomas A. Williams, Assistant Agrostologist. Prepared under the direction of the Agros-With an Appendix on Soy Beans as Food for Man. C. F. Langworthy, Ph. D., Office of Experiment Stations. 24, figs. 5. (Farmers' Bulletin No. 58.) Revised.

Bee Keeping. By Frank Benton, M. S., Assistant Entomologist.

Pp. 32, figs. 19. (Farmers' Bulletin No. 59.)

Methods of Curing Tobacco. By Milton Whitney, Chief of Division of Soils. Pp. 16. (Farmers' Bulletin No. 60.) Revised edition.

Ducks and Geese: Standard Breeds and Management. By George E. Howard, Secretary of National Poultry and Pigeon Association. Pp. 48, figs. 37. (Farmers' Bulletin No. 64.)

Meadows and Pastures: Information and Cultivation in the middle Eastern States. By Jared G. Smith, Assistant Agrostologist. Pp.

(Farmers' Bulletin No. 66.) Revised edition.

The Black Rot of the Cabbage. By Erwin F. Smith, Division of Vegetable Physiology and Pathology. Pp. 22, fig. 1. (Farmers'

Bulletin No. 68.)

Cattle Ranges of the Southwest: A History of the Exhaustion of the Pasturage and Suggestions for its Restoration. Bentley, Special Agent in Charge of Grass Stations at Abilene, Tex. Pp. 32, figs. 9. (Farmers' Bulletin No. 72.)

The Grain Smuts: How They are Caused and How to Prevent Them. By Walter T. Swingle, Special Agent, Division of Vegetable Physi-

ology and Pathology. Pp. 20, figs. 8. (Farmers' Bulletin No. 75.)

Experiment Station Work—VI. Prepared in the Office of Experiment Stations. Pp. 28, figs. 2. (Farmers' Bulletin No. 79.)

Corn Culture in the South. By S. M. Tracy, M. S. Pp. 24. (Farmers'

Bulletin No. 81.)

The Culture of Tobacco. By Otto Carl Butterweck. Pp. 24.

(Farmers' Bulletin No. 82.)

Alkali Lands. By Milton Whitney and Thomas H. Means. fig. 1. (Farmers' Bulletin No. 88.)

Cowpeas. By Jared G. Smith. Assistant Agrostologist.

fig. 1. (Farmers' Bulletin No. 89.)

The Vegetable Garden. By Charles H. Greathouse, A. M., Division of Publications. Pp. 24, figs. 8. (Farmers' Bulletin No. 94.) Millets. By Thomas A. Williams, Assistant Agrostologist.

figs. 6. (Farmers' Bulletin No. 101.)

Southern Forage Plants. Compiled from the Publications of the Division of Agrostology by F. Lamson-Scribner, Agrostologist. Pp. 48, figs. 14. (Farmers' Bulletin No. 102.)

Breeds of Dairy Cattle. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. (Reprinted from the Report of the Bureau of Animal Industry for 1898.) Pp. 48, figs. 21. (Farmers' Bulletin No. 106.)

Experiment Station Work—XIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 3. (Farmers'

Bulletin No. 107.)

Farmers' Reading Courses. (Abridgment of Bulletin No. 72, Office of Experiment Stations, by L. H. Bailey.) Pp. 20. (Farmers' Bulletin No. 109.)

Rice Culture in the United States. By Dr. S. A. Knapp. Pp. 28.

(Farmers' Bulletin No. 110.)

The Farmer's Interest in Good Seed. By A. J. Pieters, In Charge of Pure-Seed Investigations, Division of Botany. Pp. 24, figs. 7. (Farmers' Bulletin No. 111.)

The Apple and How to Grow It. By G. B. Brackett, Pomologist.

Pp. 32, figs, 10. (Farmers' Bulletin No. 113.)

The Principal Insects Affecting the Tobacco Plant. By L. O. Howard, Entomologist. Pp. 32, figs. 25. (Farmers' Bulletin No. 120.) Experiment Station Work—XVII. Prepared in the Office of Ex-

Experiment Station Work—XVII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 6. (Farmers' Bulletin No. 124.)

Eggs and Their Uses as Food. By C. F. Langworthy, Ph. D. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 32. (Farmers' Bulletin No. 128.)

Household Tests for the Detection of Oleomargarine and Renovated Butter. By G. E. Patrick, Assistant in the Division of Chemistry.

Pp. 11. (Farmers' Bulletin No. 131.)

Experiment Station Work—XVIII. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 32, figs. 14. (Farmers' Bulletin No. 133.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Instructions for Voluntary Observers. Second edition, comprising circulars B and C, Instrument Division. Prepared under direction of Willis L. Moore, Chief of Weather Bureau. Pp. 28, frontispiece, figs. 9. (W. B. No. 250.)

Monthly Weather Review. August, 1901. Vol. XXIX, No. 8.
Pp. 341-397, pls. 3, charts 8. (W. B. No. 251.) Price 20 cents.

Monthly Weather Review. Sentember 1901. Vol. XXIX. No. 8.

Monthly Weather Review. September, 1901. Vol. XXIX, No. 9. Pp. 399-445, charts 10. (W. B. No. 253.) Price 20 cents.

The Forecaster and the Newspaper. By Harvey Maitland Watts, of the *Philadelphia Press*. Pp. 22, maps 6.

Charts of the Weather Bureau—

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 30, Month of October, 1901.)

Daily Weather Map, showing weather conditions throughout the United States and giving forecasts of probable changes.

#### PUBLICATIONS NOT AVAILABLE.

Inspection Work of the Agricultural Experiment Stations in the United States. Pp. 465-487. (Reprinted from the Agricultural Experiment Stations in the United States, U. S. Department of Agriculture, Office of Experiment Stations, Bulletin No. 80.)

General Review of the Work of the Division of Soils. By Milton Whitney, Chief of Division. Pp. iii., 19-60. (Reprinted from the Report on Field Operations of the Division of Soils for 1900.)

Investigations on the Physical Properties of Soils. By Lyman J. Briggs. Pp. ii., 413-421, fig. 1. (Reprinted from the Report on Field Operations of the Division of Soils for 1900.)

Approved: Geo. Wm. Hill, Editor and Chief.

James Wilson, Secretary of Agriculture.

This circular will be sent regularly to all who apply for it.

# United States Department of Agriculture, DIVISION OF PUBLICATIONS.

Washington, D. C., December 31, 1901.

## MONTHLY LIST OF PUBLICATIONS.

[December, 1901.]

Note.—To obtain those publications, to which a Price is affixed, application must be made to the Superintendent of Documents, Union Building, Washington, D. C., to whom all remit-

tances must be directed.

Publications for free distribution may be obtained on application to the Secretary of Agriculture, Washington, D. C. Free publications are not distributed by the Superintendent of

The Department of Agriculture does not distribute nor control the distribution of publications of the State Agricultural Experiment Stations. Application for them should be made to the several stations in the different States.

Trichinosis in Germany. Part I. General Remarks on Trichinosis in Germany. By Ch. Wardell Stiles, Ph. D. Part II. A Statistical Review of Trichinosis in Germany During the Eighteen Years 1881–1898. By Ch. Wardell Stiles, Ph. D. Part III. European Cases of Trichinosis of Alleged American Origin. By Ch. Wardell Stiles, Ph. D. Part IV. Bibliography of Trichinosis in Germany. By Albert Hassall, M. R. C. V. S. Pp. 211. (Bulletin No. 30, Bureau of Animal Industry.) Price 15 cents.

The Influence of Environment Upon the Composition of the Sugar Beet. By Harvey W. Wiley, Chief of Bureau, in collaboration with the Weather Bureau and the Agricultural Experiment Stations of Indiana, Iowa, Kentucky, Michigan, New York, Cornell University, North Carolina, Utah, and Wisconsin. charts 3. (Bulletin No. 64, Bureau of Chemistry.) Price 5 cents.

Report of Irrigation Investigations in California under the direction of Elwood Mead, assisted by William E. Smythe, Marsden Manson, J. M. Wilson, Charles D. Marx, Frank Soulé, C. E. Grunsky, Edward M. Boggs, and James D. Schuyler. Pp. 411, pls. 29, figs. 16. Quarto. (Bulletin No. 100, Office of Experiment Stations.) Price, cloth, \$1.25; paper, 90 cents.

Irrigation in the United States. Testimony of Elwood Mead, Irrigation Expert in Charge, Before the United States Industrial Commission, June 11 and 12, 1901. Reprinted from Report of United States Industrial Commission on Agriculture and Agricultural Labor. Pp. 47, pls. 12, fig. 1. (Bulletin No. 105, Office

of Experiment Stations.) Price 15 cents.

Experiment Station Record, Vol. XIII, No. 3. Pp. ix, 201-300, Price 10 cents.

Note.—For the convenience of those who desire to receive this publication regularly the Superintendent of Documents has decided to fix the price per volume (12 numbers), beginning with Volume VIII, at \$1, payable in advance.

Spermatogenesis and Fecundation of Zamia. By Herbert J. Webber, Physiologist, Vegetable Pathological and Physiological Investigations, Plant-Breeding Laboratory. Pp. 100, pls. 7. (Bulletin

No. 2, Bureau of Plant Industry.) Price 20 cents.

Macaroni Wheats. By Mark Alfred Carleton, Cerealist, Vegetable Pathological and Physiological Investigations. Pp. 62, pls. 11, figs. 2. (Bulletin No. 3, Bureau of Plant Industry.) Price 20 cents.

Proceedings of the International Good Roads Congress, Held at Buffalo, N. Y., September 16 to 21, 1901. Pp. 100. (Bulletin No. 21, Office of Public Road Inquiries.) Price 5 cents.

Statistics on the Fruit Industry of California. By Edwin S. Holmes, jr., Field Agent, Division of Statistics. Pp. 11. (Bulletin No. 23,

miscellaneous series, Division of Statistics.) Price 5 cents.

Crop Reporter, Vol. 3, No. 8. Published by the U. S. Department of Agriculture, under the supervision of the Statistician. Pp. 8. Organization of Department of Agriculture, 1901–1902. By Geo. Wm. Hill, Editor and Chief of Division. Pp. 20. (Circular No. 1, Division of Publications.)

#### REPRINTS.

The Stock-Poisoning Plants of Montana: A Preliminary Report. By V. K. Chesnut and E. V. Wilcox. Pp. 150, frontispiece, pls. 36. (Bulletin No. 26, Division of Botany.) Price 25 cents.

Methods of Analysis Adopted by the Association of Official Agricultural Chemists, November 11, 12, and 14, 1898. Edited by Harvey W. Wiley, Secretary. Pp. 86, figs. 4. (Bulletin No. 46, Division

of Chemistry.) Revised edition. Price 5 cents.

The Manufacture of Starch from Potatoes and Cassava. By Harvey W. Wiley, Chief of the Division of Chemistry. Pp. 48, pls. 8, figs. 17. (Bulletin No. 58, Division of Chemistry.) Price 10 cents.

Timber: An Elementary Discussion of the Characteristics and Properties of Wood. By Filibert Roth, Special Agent in Charge of Timber Physics. Under the direction of B. E. Fernow, Chief of the Division of Forestry. Pp. 88, figs. 49. (Bulletin No. 10, Division of Forestry.) Price 10 cents.

Wheat Growing and General Agricultural Conditions in the Pacific Coast Region of the United States. By Edwin S. Holmes, jr., Division of Statistics. Pp. 44, maps 4, pls. 8. (Bulletin No. 20, miscellaneous series Division of Statistics). Price 10 cents

miscellaneous series, Division of Statistics.) Price 10 cents.

Plant Poisoning of Stock in Montana. By E. V. Wilcox, Ph. D.,

Office of Experiment Stations. Pp. iii, 91–121, pls. 13, figs. 2.

[Reprint from Annual Report Bureau of Animal Industry.]

Soil Survey from Raleigh to Newbern, N. C. By William G. Smith. Pp. iii, 187–205, figs. 2. [Reprinted from the Report on Field

Operations of the Division of Soils for 1900.

Report of the Chief of the Weather Bureau for 1901. By Willis L. Moore. Pp. 14. (From Annual Reports, Department of Agriculture.)

# FARMERS' BULLETINS—REPRINTS.

Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M., Chief of the Bureau of Animal Industry. Pp. 16. (Farmers' Bulletin No. 24.)

Kafir Corn: Characteristics, Culture, and Uses. By C. C. Georgeson, Professor of Agriculture in Kansas State Agricultural College.

Pp. 12, fig. 1. (Farmers' Bulletin No. 37.)

Spraying for Fruit Diseases. By B. T. Galloway, Chief of Division of Vegetable Physiology and Pathology. Pp. 12, figs. 6. (Farmers' Bulletin No. 38.)

Some Insects Injurious to Stored Grain. By F. H. Chittenden, Assistant Entomologist. Pp. 24, figs. 18. (Farmers' Bulletin No. 45.) Revised edition. Insects Affecting the Cotton Plant. By L. O. Howard, Ph. D., Entomologist. [Reprinted, with revision by the Author, from Bulletin 33, Office of Experiment Stations. Pp. 32, figs. 18, (Farmers' Bulletin No. 47.)

How to Grow Mushrooms. By William Falconer. Under the supervision of the Division of Vegetable Physiology and Pathology.

Pp. 20, figs. 14. (Farmers' Bulletin No. 53.)

Some Common Birds in Their Relation to Agriculture. By F. E. L. Beal, B. S., Assistant Ornithologist, Biological Survey. Pp.

40, figs. 22. (Farmers' Bulletin No. 54.)

The Dairy Herd: Its Formation and Management. By Henry E. Alvord, C. E., Chief of Dairy Division, Bureau of Animal Industry. [Reprinted, with revision by the Author, from the Yearbook of the U.S. Department of Agriculture for 1894.] Pp. 24. (Farmers' Bulletin No. 55.)

Experiment Station Work—I. Prepared in the Office of Experiment

Pp. 31, figs. 10. (Farmers' Bulletin No. 56.)

Butter Making on the Farm. By C. P. Goodrich, Dairy Instructor, Farmers' Institute Department, University of Wisconsin. Under supervision of the Dairy Division, Bureau of Animal Industry. (Farmers' Bulletin No. 57.)

By R. B. Handy, Division of Publications. Asparagus Culture.

Pp. 40, figs. 17. (Farmers' Bulletin No. 61.)

Care of Milk on the Farm. By R. A. Pearson, B. S., Assistant Chief of Dairy Division, Bureau of Animal Industry. Pp. 40, figs. (Farmers' Bulletin No. 63.)

Some Essentials in Beef Production. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 24, figs.

17. (Farmers' Bulletin No. 71.)

Experiment Station Work—IV. Prepared in the Office of Experiment Stations. Pp. 32, figs. 3. (Farmers' Bulletin No. 73.)
The Liming of Soils. By H. J. Wheeler, Ph. D., Chemist of the

Rhode Island Agricultural Experiment Station. Pp. 20. (Farmers' Bulletin No. 77.) Revised.

Experiment Station Work—V.—Prepared in the Office of Experiment Stations. Pp. 32, figs. 2. (Farmers' Bulletin No. 78.)

Thirty Poisonous Plants of the United States. By V. K. Chesnut, Assistant Botanist, U. S. Department of Agriculture. Pp. 32, figs. 24. (Farmers' Bulletin No. 86.)
Potato Diseases and Their Treatment. By B. T. Galloway, Chief of

the Division of Vegetable Physiology and Pathology. Pp. 12,

figs. 4. (Farmers' Bulletin No. 91.)

Good Roads for Farmers. By Maurice O. Eldridge, Acting Director, Office of Public Road Inquiries. Pp. 47, figs. 49. (Farmers' Bulletin No. 95.)

Raising Sheep for Mutton. By Charles F. Curtiss, Director of the Iowa Agricultural Experiment Station. Pp. 48, figs. 18. (Farm-

ers' Bulletin No. 96.)

Three Insect Enemies of Shade Trees. By L. O. Howard, Ento-[Reprinted, with some annotations by the author, from the Yearbook of the Department of Agriculture for 1895.] Pp. 30, figs. 11. (Farmers' Bulletin No. 99.)

Saltbushes. By P. Beveridge Kennedy, Ph. D., Assistant in the Division of Agrostology. Prepared under the direction of the Agrostologist. Pp. 20, figs. 9. (Farmers' Bulletin No. 108.)

The Farmers' Interest in Good Seed. By A. J. Pieters, in charge of Pure-Seed Investigations, Division of Botany. Pp. 24, figs. 7.

(Farmers' Bulletin No. 111.)

Bread and the Principles of Bread Making. By Helen W. Atwater. Prepared under the supervision of the Office of Experiment Stations. A. C. True, Director. Pp. 39, figs. 3. (Farmers' Bulletin No. 112.)

Experiment Station Work—XIV. Prepared in the Office of Experiment Stations. A. C. True, Director. Pp. 28, figs. 5. (Farm-

ers' Bulletin No. 114.)

Hop Culture in California. By Daniel Flint. Pp. 28, figs. 2.

(Farmers' Bulletin No. 115.)

Red Clover Seed: Information for Purchasers. By A. J. Pieters, Assistant Botanist, Division of Botany, in charge of Pure Seed Investigations. Pp. 11, figs. 2. (Farmers' Bulletin No. 123.) Important Insecticides: Directions for Their Preparation and Use.

Important Insecticides: Directions for Their Preparation and Use. (A revision of Farmers' Bulletin No. 19.) By C. L. Marlatt, M. S., First Assistant Entomologist. Pp. 42, figs. 6. (Farmers' Bulletin No. 127.)

Tree Planting on Rural School Grounds. By Wm. L. Hall, Assistant Superintendent of Tree Planting, Bureau of Forestry. Pp. 38,

figs. 17. (Farmers' Bulletin No. 134.)

Emmer: A Grain for the Semiarid Regions. By Mark Alfred Carleton, Cerealist, Vegetable Pathological and Physiological Investigations, Bureau of Plant Industry. Pp. 16, figs. 3. (Farmers' Bulletin No. 139.)

#### PUBLICATIONS OF THE WEATHER BUREAU.

(For the publications of the Weather Bureau, requests and remittances should be directed to the Chief of that Bureau.)

Instructions for the Care and Management of Sunshine Recorders. Circular G, Instrument Division. Second edition. By C. F. Marvin, Professor of Meteorology. Prepared under the direction of Willis L. Moore, Chief U. S. Weather Bureau. Pp. 19, figs. 6. (W. B. No. 252.)

Monthly Weather Review, October, 1901. Vol. XXIX, No. 10. Pp. 447–487, pls. 1, charts 9. (W. B. No. 255.) Price 20 cents.

Climate and Crop Bulletin (series of 1901), reporting temperature and rainfall, with reference to their effect on crops. (No. 31, for the month of November 1901)

Snow and Ice Bulletin for Tuesdays December 3, 10, 17, 24, and 31, (These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau Stations, supplemented by reports from selected voluntary observers.)

Daily Weather Map, showing weather conditions throughout the United

States and giving forecasts of probable changes.

#### PUBLICATION NOT AVAILABLE.

Application of the Theory of Solution to the Study of Soils. By Frank K. Cameron. Pp. iii, 423–453. [Reprinted from the Report on Field Operations of the Division of Soils for 1900.]

Approved: Geo. Wm. Hill, Editor and Chief.

James Wilson, Secretary of Agriculture.